TOSHIBA

FILE NO. 050-200122

SERVICE MANUAL

PLASMA DISPLAY MONITOR

50WP16A, 50WP16C
50WP16H, 50WP16R
50WP16EA, 50HP81

PRINTED IN JAPAN Oct.,2001 Ⓟ

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

CONTENTS

Page

1 Plasma Display Technology 4
1.1. Plasma display panel 4
1.2. Plasma display panel structure 4
1.3. Rear Glass Structure 4
1.4. Front Glass Structure 4
1.5. Pixel Structure 5
1.6. Sub Field Drive system 5
1.7. Initialization 5
1.8. Write 5
1.9. Wall Voltage 6
1.10. Sustain Step 1 6
1.11. Sustain Step 2 6
1.12. Sustain Step 3 6
1.13. Sustain Step 4 7
1.14. Sustain Step 5 7
1.15. Repeat Step 1 to Step 5 7
1.16. Sub-Field drive 7
1.17. Dual Scan 8
1.18. Plasma AI (Adaptive brightness Intensifier) 8
1.19. Real Black drive 8
2 Service Hint 9
3 Adjustment Procedure 10
3.1. +B Set-up 10
3.2. Driver Set-up 10
3.3. Adjustment Volume Location 11
3.4. Test Point Location 11
3.5. Initialization Pulse Adjust 12
4 Alignment Setting 13
4.1. How to access Alignment 13
4.2. Exit 13
4.3. IIC menu structure 14
5 Alignment 16
5.1. DG contrast 16
5.2. DVCO adjust 16
5.3. NTSC panel white balance 17
5.4. PAL/SECAM panel white balance 18
5.5. Pedestal setting 20
5.6. PC/RGB panel white balance 21
5.7. HD/ 525i /525p panel white balance 23
5.8. 625i panel balance 25
5.9. Sub brighness setting 26
5.10. Pos./Size setting 28
5.11. Panel APL/ABL 28
5.12. SG Hold 28
5.13. Aging 28
5.14. LSI 33 Adjust 28

Page

5.15. CAT (Computer Aided Test) mode 28
6 Self Check 29
6.1. Display Indication 29
7 Trouble shooting guide 30
7.1. No Power 30
7.2. No Picture 31
7.3. Local screen failure 31
8 P.C.B. (Printed Circuit Board) exchange 32
8.1. Caution 32
8.2. Quick adjustment after P.C.B. exchange 32
9 Location of Lead Wiring 33
10 Basic Circuit Explanation 34
10.1. Power Supply Circuit 34
10.2. Energy Recovery Drive Pulse Output 35
11 IC Block Diagram 36
12 Conductor Views 39
12.1. F-Board 39
12.2. P1-Board 40
12.3. P4-Board 43
12.4. P3, P5, P6, P7, P8, P9 and T11-Board 45
12.5. H, H3, S1 and V1-Board 47
12.6. DG-Board 50
12.7. D-Board 52
12.8. C1-Board 55
12.9. C2-Board 56
12.10. C3-Board 57
12.11. C4-Board 58
12.12. C5-Board 59
12.13. C6-Board 60
12.14. C7-Board 61
12.15. C8-Board 62
12.16. SC-Board 63
12.17. SD-Board 66
12.18. SU-Board 67
12.19. SS, SS2 and SS3-Board 68
13 Block and Schematic Diagrams 71
13.1. Schematic Diagram Notes 71
13.2. Main Block Diagram 72
13.3. Power (F, P1, P3, P4, P5, P6, P7, P8 and P9 Board) Block Diagram 73
13.4. P1-Board (1/2) Schematic Diagram 74
13.5. P1-Board (2/2) Schematic Diagram 75
13.6. P3 and P4-Board Schematic Diagram 76
13.7. P5, P6, P7 and P8-Board Schematic Diagram 77
13.8. P9 and F-Board Schematic Diagram 78
13.9. H-Board Block Diagram 79

13.10. H-Board (1/4) Schematic Diagram ····· 80
13.11. H-Board (2/4) Schematic Diagram ····· 81
13.12. H-Board (3/4) Schematic Diagram ····· 82
13.13. H-Board (4/4) Schematic Diagram ····· 83
13.14. DG Board Block Diagram ····· 84
13.15. DG-Board (1/4) Schematic Diagram ····· 85
13.16. DG-Board (2/4) Schematic Diagram ····· 86
13.17. DG-Board (3/4) Schematic Diagram ····· 87
13.18. DG-Board (4/4) Schematic Diagram ····· 88
13.19. T11 Board Schematic Diagram ····· 89
13.20. D-Board IC Location ····· 90
13.21. D-Board Information (1/4) ····· 91
13.22. D-Board Information (2/4) ····· 92
13.23. D-Board Information (3/4) ····· 93
13.24. D-Board Information (4/4) ····· 94
13.25. D-Board Block Diagram ····· 95
13.26. D-Board (1/36) Schematic Diagram ····· 96
13.27. D-Board (2/36) Schematic Diagram ····· 97
13.28. D-Board (3/36) Schematic Diagram ····· 98
13.29. D-Board (4/36) Schematic Diagram ····· 99
13.30. D-Board (5/36) Schematic Diagram ····· 100
13.31. D-Board (6/36) Schematic Diagram ····· 101
13.32. D-Board (7/36) Schematic Diagram ····· 102
13.33. D-Board (8/36) Schematic Diagram ····· 103
13.34. D-Board (9/36) Schematic Diagram ····· 104
13.35. D-Board (10/36) Schematic Diagram ····· 105
13.36. D-Board (11/36) Schematic Diagram ····· 106
13.37. D-Board (12/36) Schematic Diagram ····· 107
13.38. D-Board (13/36) Schematic Diagram ····· 108
13.39. D-Board (14/36) Schematic Diagram ····· 109
13.40. D-Board (15/36) Schematic Diagram ····· 110
13.41. D-Board (16/36) Schematic Diagram ····· 111
13.42. D-Board (17/36) Schematic Diagram ····· 112
13.43. D-Board (18/36) Schematic Diagram ····· 113
13.44. D-Board (19/36) Schematic Diagram ····· 114
13.45. D-Board (20/36) Schematic Diagram ····· 115
13.46. D-Board (21/36) Schematic Diagram ····· 116
13.47. D-Board (22/36) Schematic Diagram ····· 117
13.48. D-Board (23/36) Schematic Diagram ····· 118
13.49. D-Board (24/36) Schematic Diagram ····· 119
13.50. D-Board (25/36) Schematic Diagram ····· 120
13.51. D-Board (26/36) Schematic Diagram ····· 121
13.52. D-Board (27/36) Schematic Diagram ····· 122
13.53. D-Board (28/36) Schematic Diagram ····· 123
13.54. D-Board (29/36) Schematic Diagram ····· 124
13.55. D-Board (30/36) Schematic Diagram ····· 125
13.56. D-Board (31/36) Schematic Diagram ····· 126
13.57. D-Board (32/36) Schematic Diagram ····· 127
13.58. D-Board (33/36) Schematic Diagram ····· 128
13.59. D-Board (34/36) Schematic Diagram ····· 129
13.60. D-Board (35/36) Schematic Diagram ····· 130
13.61. D-Board (36/36) Schematic Diagram ····· 131
13.62. C1, C2, C3, C4, C5, C6, C7 and C8 Board Block Diagram ····· 132
13.63. C1-Board Schematic Diagram ····· 133
13.64. C2-Board Schematic Diagram ····· 134
13.65. C3-Board Schematic Diagram ····· 135
13.66. C4-Board and V1-Board Schematic Diagram ····· 136
13.67. C5-Board Schematic Diagram ····· 137
13.68. C6-Board Schematic Diagram ····· 138
13.69. C7-Board Schematic Diagram ····· 139
13.70. C8-Board Schematic Diagram ····· 140
13.71. SC-Board Block Diagram ····· 141
13.72. SC-Board (1/2) Schematic Diagram ····· 142
13.73. SC-Board (2/2) Schematic Diagram ····· 143
13.74. SD-Board (1/2) Schematic Diagram ····· 144
13.75. SD-Board (2/2) Schematic Diagram ····· 145
13.76. SU-Board (1/2) Schematic Diagram ····· 146
13.77. SU-Board (2/2) Schematic Diagram ····· 147
13.78. SS, SS2 amd SS3 Board Block ····· 148
13.79. SS-Board (1/2) Schematic Diagram ····· 149
13.80. SS-Board (2/2) SS2-Board, SS3-Board and S1-Board Schematic Diagram ····· 150
14 Panel drive signal wave form ····· 151
15 Signal Waveform ····· 152
16 Mechanical Parts Location ····· 153
17 Mechanical Replacement Parts List ····· 155
18 Replacement Parts List ····· 156
18.1. Relpacement Parts List Notes ····· 156
18.2. Electrical Replacement Parts List ····· 157
19 Specifications ····· 180

1 Plasma Display Technology

1.1. Plasma display panel

	CRT	PDP
Scan	Dot Sequence	Line Sequence
	Interlace/ Progressive	Progressive
Emission	Dot Sequence	Simultaneous
Phosphor Excitation	Electron	Ultra Violet Lay
Brightness Control	Beam Current control	Discharge Time control (Sub-Filed Drive)

Fig. A

Toshiba 50 wide plasma display panel is develope for large screen multimedia display with space saving.

The plasma display panel use AC type Sub-field drive system with Dual scanning system.

This panel have also Asymmetric cell and Plasma AI technology.

Fig. A Is the CRT and Plasma Display Panel(PDP) comparison chart.

1.2. Plasma display panel structure

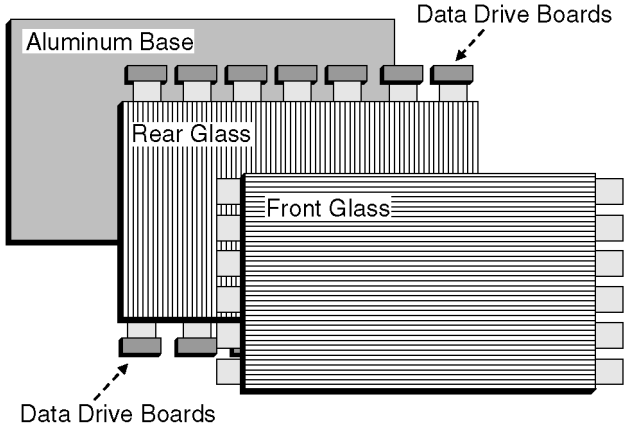


Fig. B

Plasma display panel structure

Plasma display panel is consist of front glass, rear glass and Aluminum base.

The front glass has each 768 lines scan and sustain transparence electrodes.

The rear glass has 4098 (1366 x 3) data electrodes on the inner surface. These electrodes are connected to the data drive circuit boards directory.

1.3. Rear Glass Structure

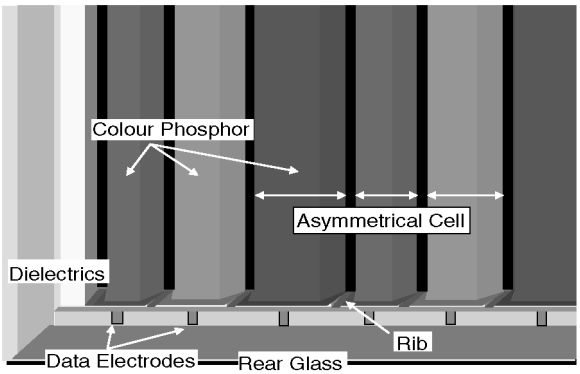


Fig. C

On the rear glass the data electrode is mounted.

The dielectric is coated on the rear glass.

Red, Green and Blue colour phosphors are formed on the data electrode with the ribs. However to improve colour reproduction and brightness, each colour phosphors are formed different width This is called " Asymmetrical cell ".

1.4. Front Glass Structure

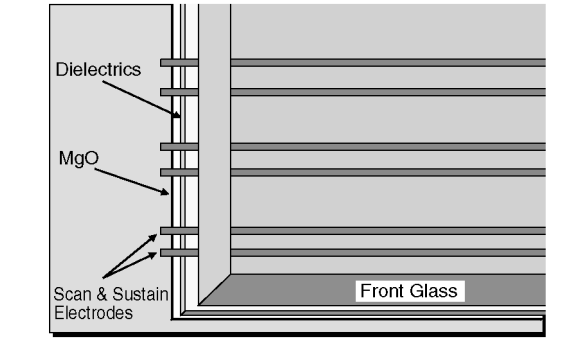


Fig. D

On the front glass scan and sustain transparent electrodes are mounted in pair.

The dielectrics is coated on the front grass.

MgO over coat is also applied on the dielectrics.

The front and rear glasses are piled and sealed . And low presser gas are charged between two glasses.

1.5. Pixel Structure

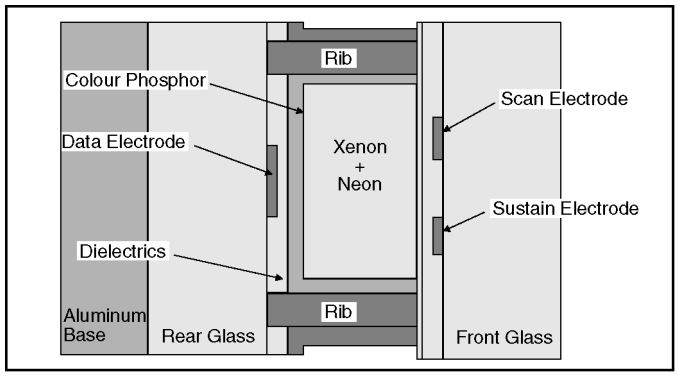


Fig. E

50 inch plasma display panel has 1,049,088 pixels.

Each pixels structure is shown fig. E.

1.6. Sub Field Drive system

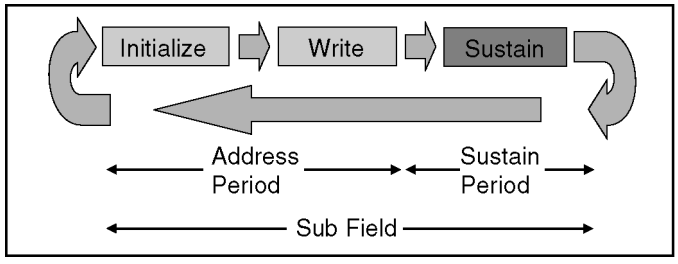


Fig. F

Brightness control of plasma display panel is carried out by plasma discharge time change. To control each pixelís brightness Sub-field drive system is used.

A sub-field is consist of Initialize, Write and sustain operation.

1.7. Initialization

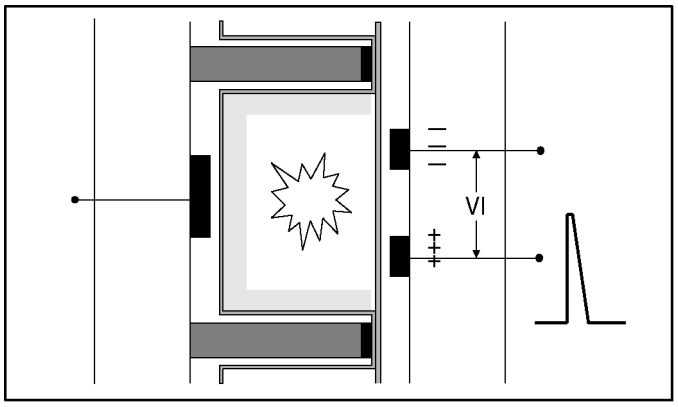


Fig. G

To clear any remaining electric charge into the pixel, trapezoid voltage is applied between the scan and sustain electrodes.

Plasma discharge is started but the discharge become small gradually.

Then any electric charge is cleared.

1.8. Write

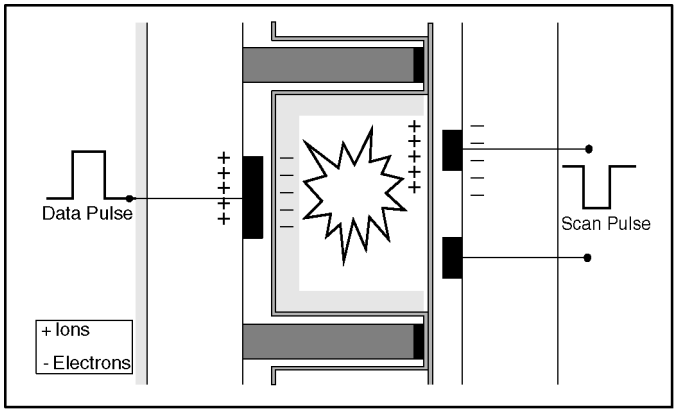


Fig. H

Data Pulse which is positive polarity is input to data electrode and Scan pulse which is negative polarity is input to scan electrode simultaneously.

That means sum of data and scan pulses voltage is applied between two electrodes as discharge start voltage.

Discharge is started into the pixel and gas is ionized.

During discharging Ion is charged on the scan electrode side and electron is charged on data electrode side.

1.9. Wall Voltage

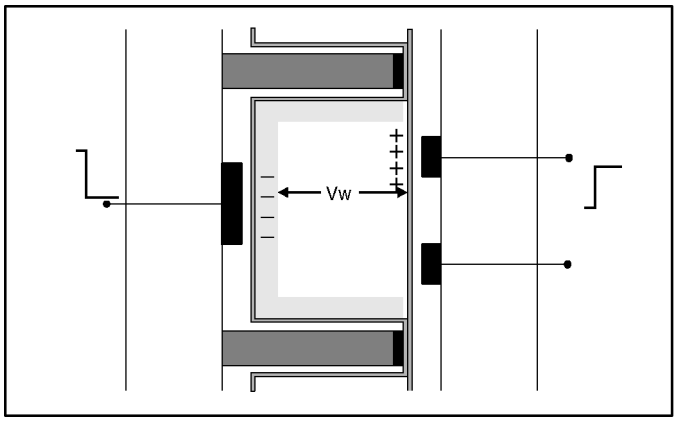


Fig. I

When input pulses are stopped, Ions and Electrons which are charged on the dielectric around the electrodes are remained.

This charge is called Wall Voltage (Pilot voltage).

This operation is called Write .

1.10. Sustain Step 1

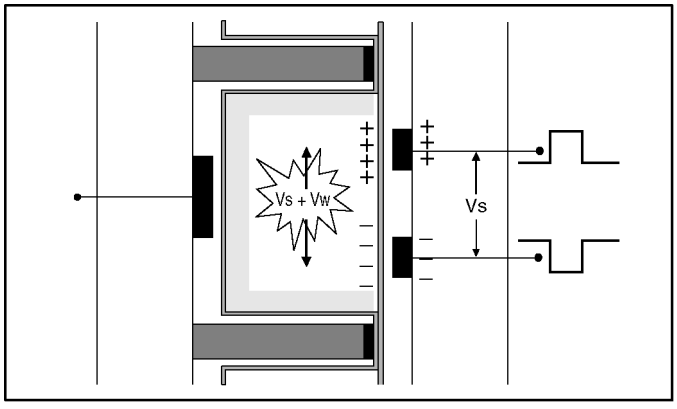


Fig. J

Negative polarityís Sustain pulse is input between sustain and scan electrodes and voltage potential between two electrodes becomes sum of Sustain pulse and wall voltage.

Then discharge start.

1.11. Sustain Step 2

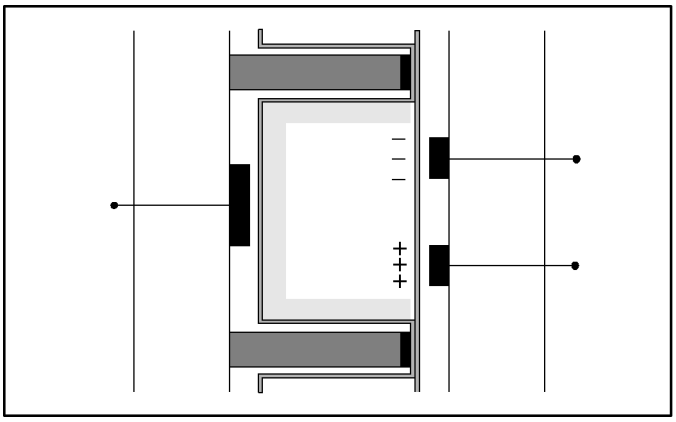


Fig. K

When sustain pulse is stopped, Ions and Electrons are remained again as Wall voltage. However polarity of wall voltage is reversed.

1.12. Sustain Step 3

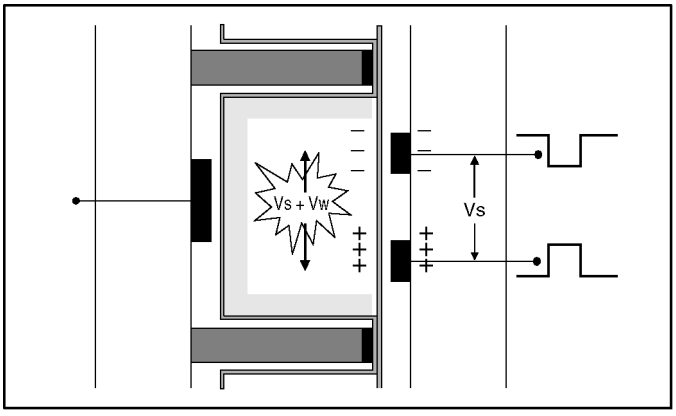


Fig. L

Positive polarity´s Sustain pulse is input between sustain and scan electrodes and discharge start again.

1.13. Sustain Step 4

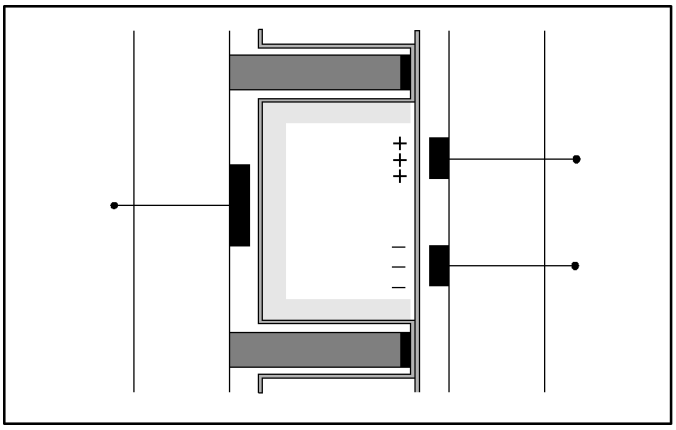


Fig. M

When sustain pulse is stopped, Ions and Electrons are remained again as Wall voltage. However polarity of wall voltage is reversed.

1.14. Sustain Step 5

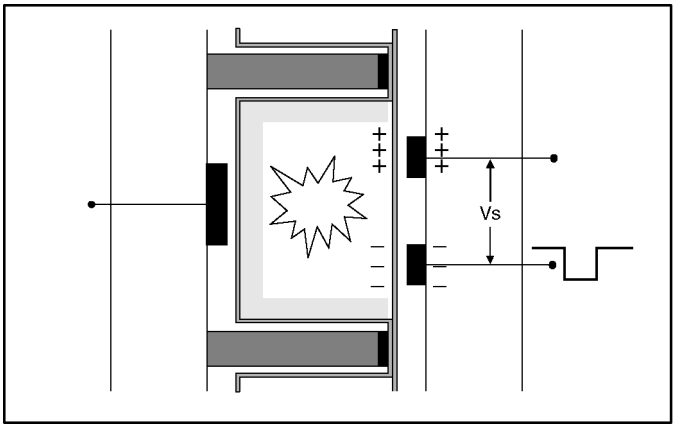


Fig. N

Ions and Electrons which is generated by 2nd sustain discharge are charged on the pixel wall(dielectric) around the electrodes.

1.15. Repeat Step 1 to Step 5

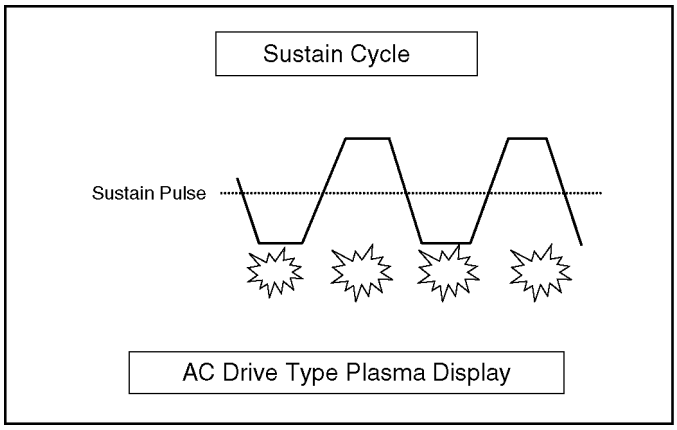


Fig. O

To keep discharge continuously step 1 to 5 operation will be repeated.

As the result sustain pulse is alternated. Therefore we call this drive system AC Drive type.

If sustain operation is repeated longer, brightness level of the pixel is increased. Therefore depend on sustain discharge time brightness of pixel is controlled.

1.16. Sub-Field drive

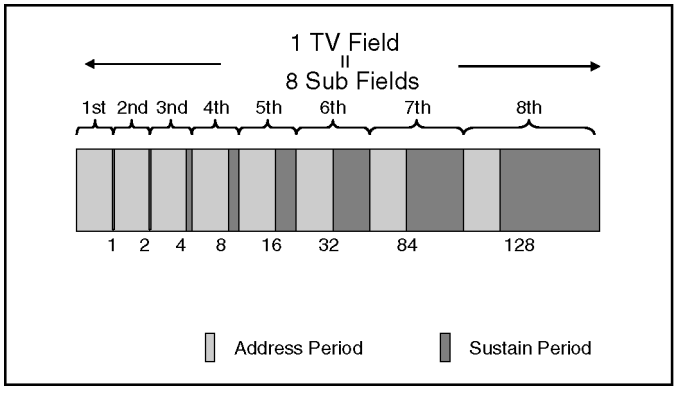


Fig. P

Sub-Field drive is PDP unique system.

While one TV field period, 8 bits digital video signal component is reproduced by 8 sub-fields operation.

Each Sub-Field´s address period are all same.(Consist of one initialization and 768 scanning operation)

But Sustain period of each Sub-Field are different.1st Sub-Field(SF) reproduce only 1 step brightness.

2nd SF reproduce 2 steps brightness.

Each sub-field´s sustain period are increased gradually.

However total 256 brightness difference can be reproduced on the screen.

1.17. Dual Scan

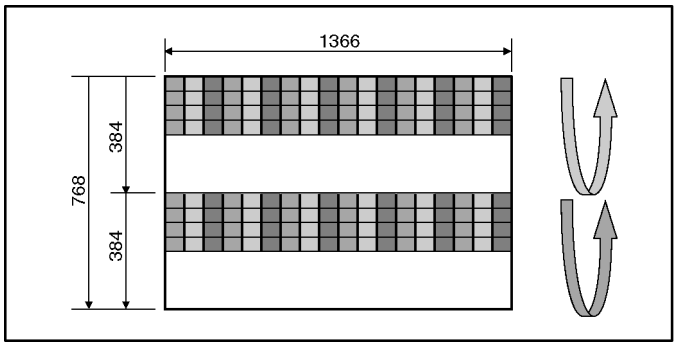


Fig. Q

The sustain period of sub-field drive system. Therefore brightness peak is limited. Because 768 horizontal lines scanning is carried out during address period.

Dual scan system can reduce scanning time from 768 to 384 in the address period.

Then spaced time by dual scanning can be used for sustain operation.

As the result Brightness peak level can be increased.

1.18. Plasma AI (Adaptive brightness Intensifier)

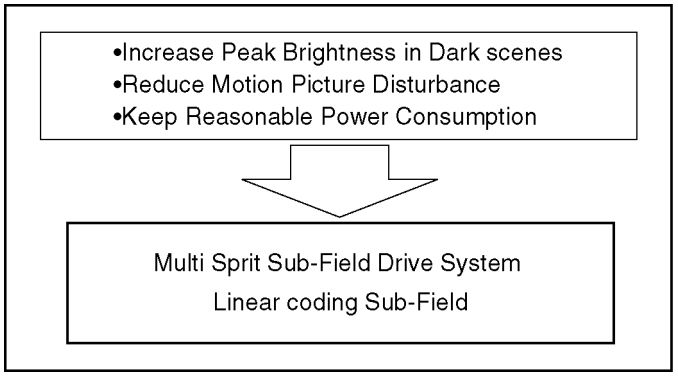


Fig. R

Plasma AI control sub-field drive operation which is called Multi-Sprit Sub-Field drive control system.

Depend on the picture contents (APL : Average Picture Level) sustain time format of each sub-field are also rearranged from binary format to linear cording sustain time. (Linear coding sub-field)

Plasma AI select the best display condition for Plasma display panel to display natural and crisp picture.

1.19. Real Black drive

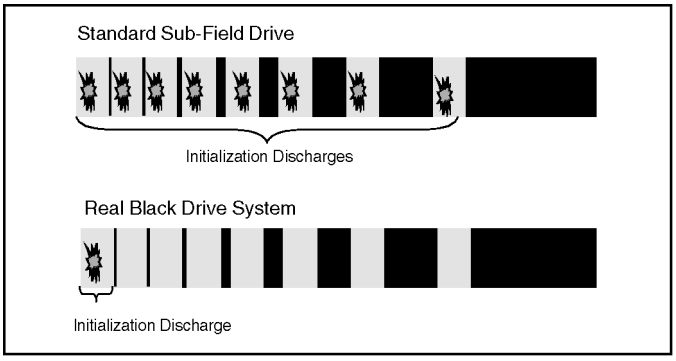


Fig. S

For standard sub field drive, initialization discharge is done at each sub field. So that during one TV field period same sub field numbers of discharges are done even black signal was displayed.

Therefore there are small emission at the black area.

The Real Black drive system improve black reproduction.

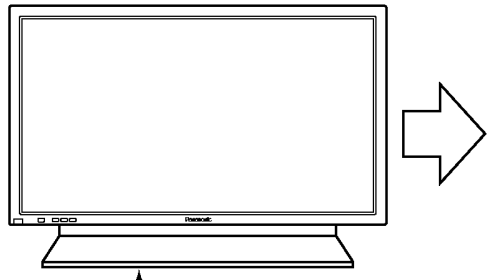
Initialization discharge is done at first sub field only.

Remaining sub field are not required discharge because Real Black drive circuit applies initialization electric field remainder pulse.

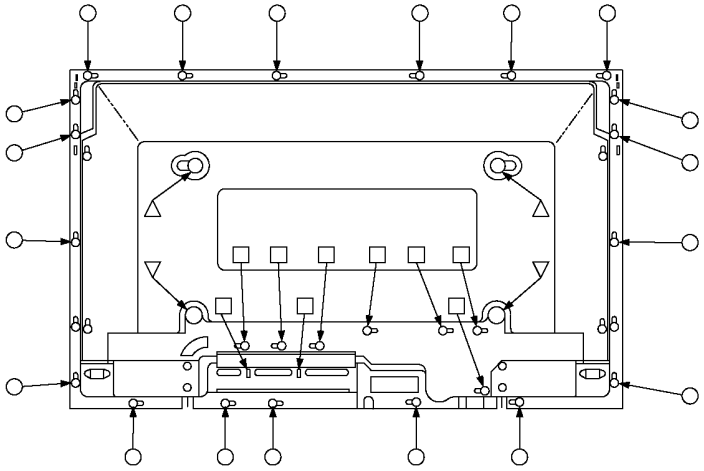
2 Service Hint

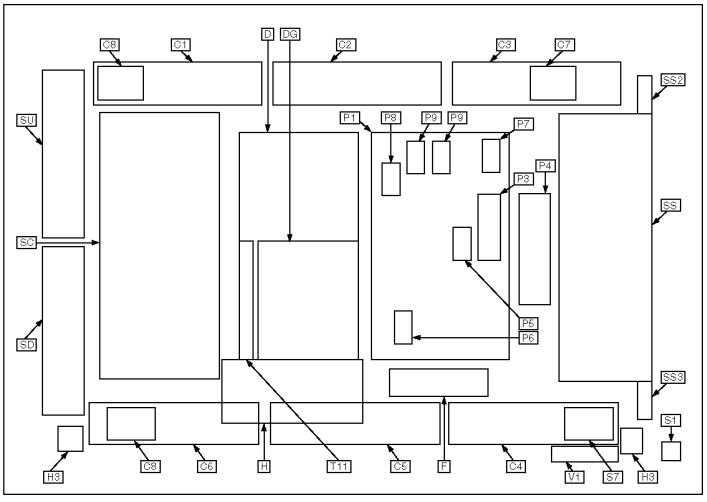
Remove the Back Cover

Stand the Unit used for Optional Accessory



Optional Accessory
(Pedestal)





Remove: 4 screws (△)
9 screws (□)
19 screws (○)

Service Position

Baord name	Function	Board name	Function
C1	Data drive (Upper Left)	P4	Panel drive power
C2	Data drive (Upper Center)	P5	Processing voltage control
C3	Data drive (Upper Right)	P6	PFC oscillator
C4	Data drive (Lower Left)	P7	High Voltage protect
C5	Data drive (Lower Center)	P8	Low Voltage protect
C6	Data drive (Lower Right)	P9	Regulator
C7	Saving power	S1	Power switch
C8	Saving power	SC	Scan drive
D	Digital process & control	SD	Scan drive output (Lower)
DG	RGB/IF	SS	Sustain drive
F	Line Filter	SS2	Sustain connection (Upper)
F	Line Filter	SS3	Sustain connection (Lower)
H	Rear terminal	SU	Scan drive output (Upper)
H3	Speaker terminal	T11	Interface
P1	Power supply	V1	Front switch & Remote Receiver
P3	Sustain voltage control		

3 Adjustment Procedure

3.1. +B Set-up

3.1.1. Item / Preparation

1. Confirm the main voltage set switch Is set to 230V. (A, B, and E version) Confirm the main voltage set switch is set to 110V. (U version)

   Note:

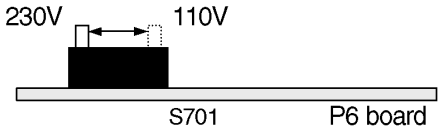
   230V covers input AC voltage from 200V till 260V, and 110V covers from 90V till 130V.

2. Input a Grey scale signal.
3. Set the picture controls: -

   Picture mode: Normal

   White balance: Normal

3.1.2. Adjustments



Adjust and confirm indicated test point for the specified voltage.

Test point	Voltage	Volume	Name
P4 pin 1 (Hot)	400V ±1V	R548	PFC
Confirmation (Cold)			
P27 pin 5	16V ±0.5V		+15V
D5 pin 1	14V ±0.5V		+13.5V
DG6 pin 1	14V ±0.5V		Audio15V
DG6 pin 3	-14V ±0.5V		Audio-15V
D5 pin 5	5.2V ±0.3V		+5.25V
D5 pin 8	3.6V ±0.2V		+3.65V
D7 pin 4	5V ±0.3V		STB5V

3.2. Driver Set-up

3.2.1. Item / Preparation

1. Input an APL 100 % white signal.
2. Set the picture controls: -

   Picture mode: Normal

   White balance: Cool

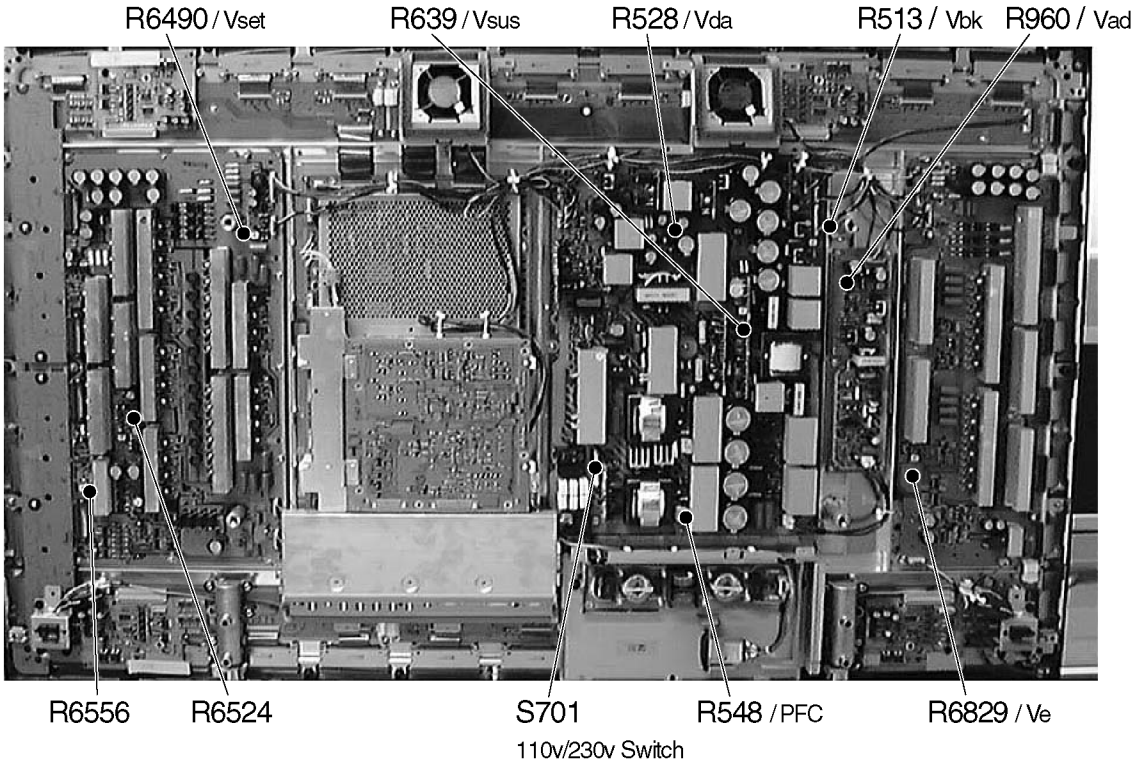
   Aspect: 16:9

3.2.2. Adjustments

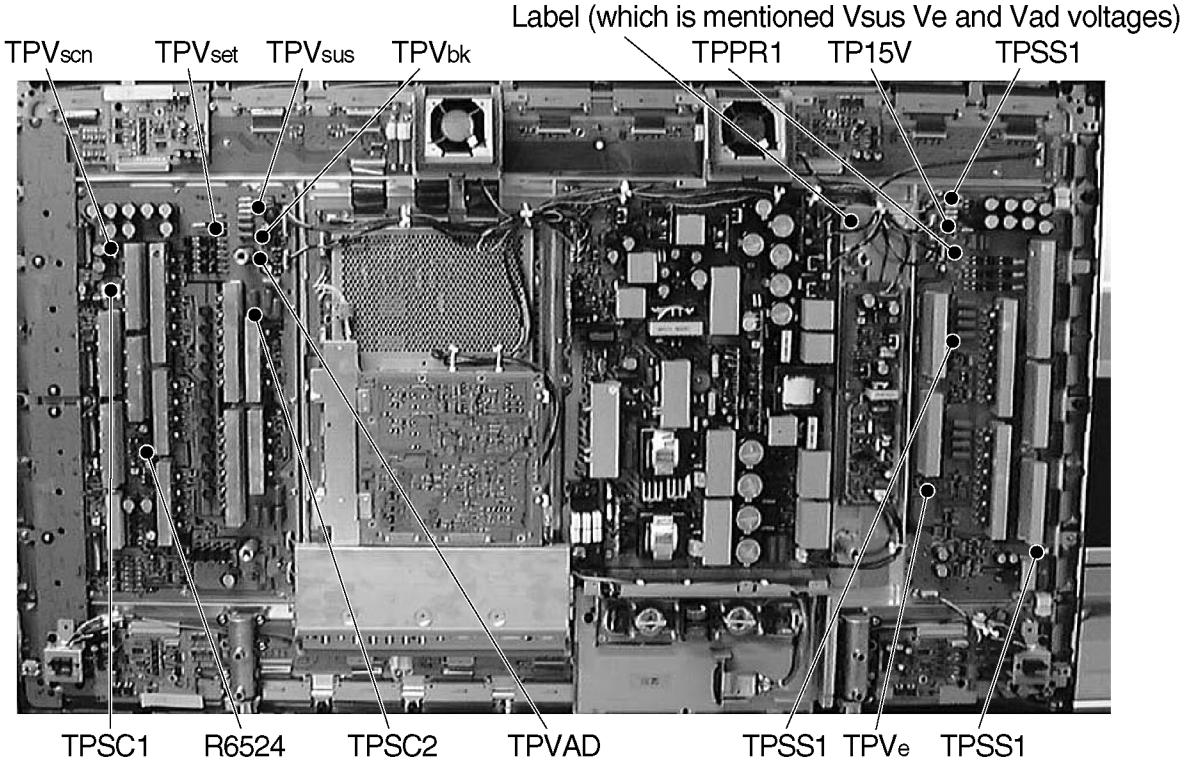
Adjust driver section voltages referring the panel data on the panel data label.

Test point	Voltage	Volume	Name
TPVSUS (SS-BOARD)	VSUS ±1V	R639(P3-BOARD)	Vsus
TPVBK (SC-BOARD)	140 V ±5V	R513(P1-BOARD)	Vbk
TPVE (SS-BOARD)	VE ±0.5V	R6829(SS-BOARD)	Ve
TPVSET (SC-BOARD)	224 V ±1V	R6490(SC-BOARD)	Vset
TPVAD (SC-BOARD)	VAD ±1V	R960(P4-BOARD)	Vad
P27 pin2 (P1-BOARD	75 V ±0.5V	R528 (P1-BOARD)	Vda
Between TPVscn and TPVAD (SC-BOARD)	120 + (Vad) ±0.5V	R967 (P4-BOARD)	Vscan

3.3. Adjustment Volume Location



3.4. Test Point Location



3.5. Initialization Pulse Adjust

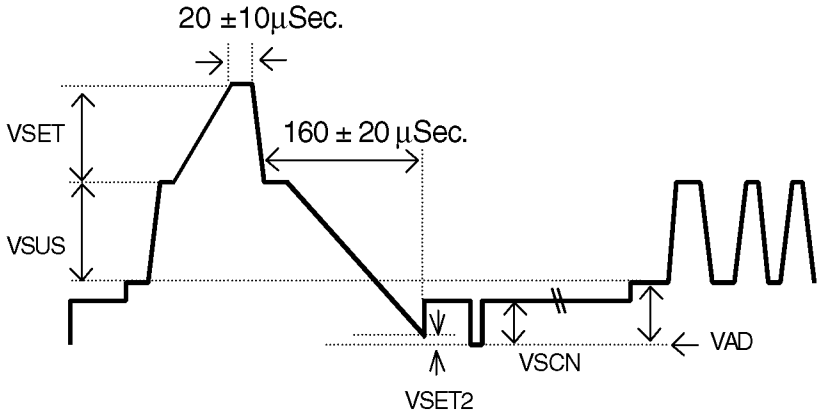
1. Input a Cross hatch signal.
2. Set the picture controls: -

   Picture mode: Normal

   White balance: Cool

Adjust the indicated test point for the specified wave form.

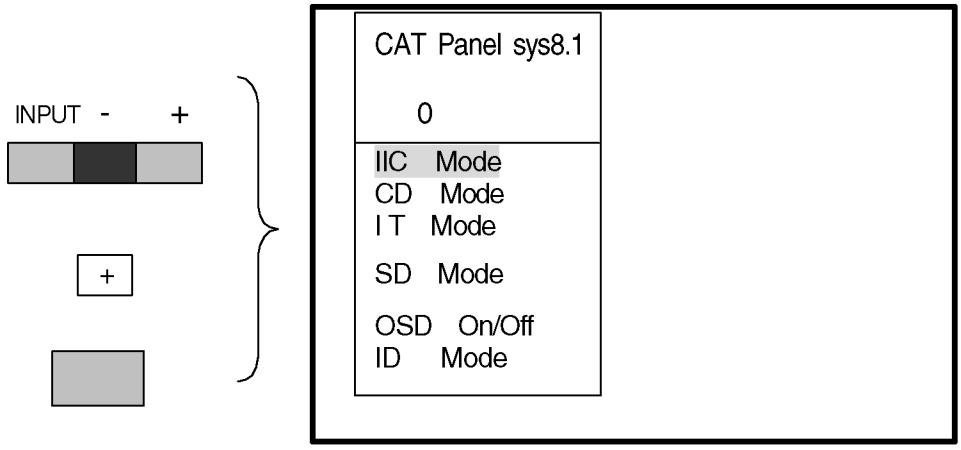
Test point	Volume	
TPSC1 (SC)	R6524 (SC)	20 ± 10µ Sec
TPSC1 (SC)	R6556 (SC)	160 ± 20µ Sec



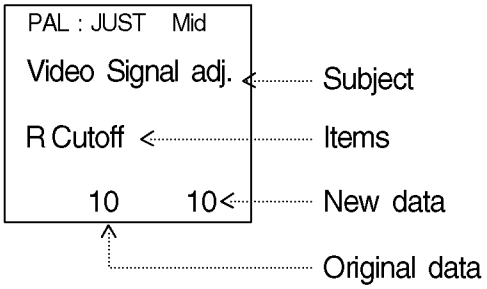
4 Alignment Setting

4.1. How to access Alignment

1. Press and hold the **Volume down / -** button on the front panel of the unit and press the **status [+]** button on the remote control 3 times quickly within 1 second, this will place the unit into the CAT menu (Main service mode)

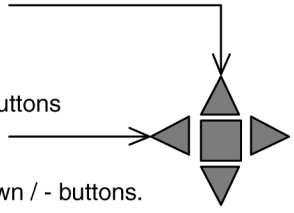


2. Press the Access button on the remote control.



3. Select the alignment Subject by the UP or DOWN button of the Cross buttons on the remote control.

4. Select the alignment item by the LEFT or Right buttons of the Cross buttons on the remote control.

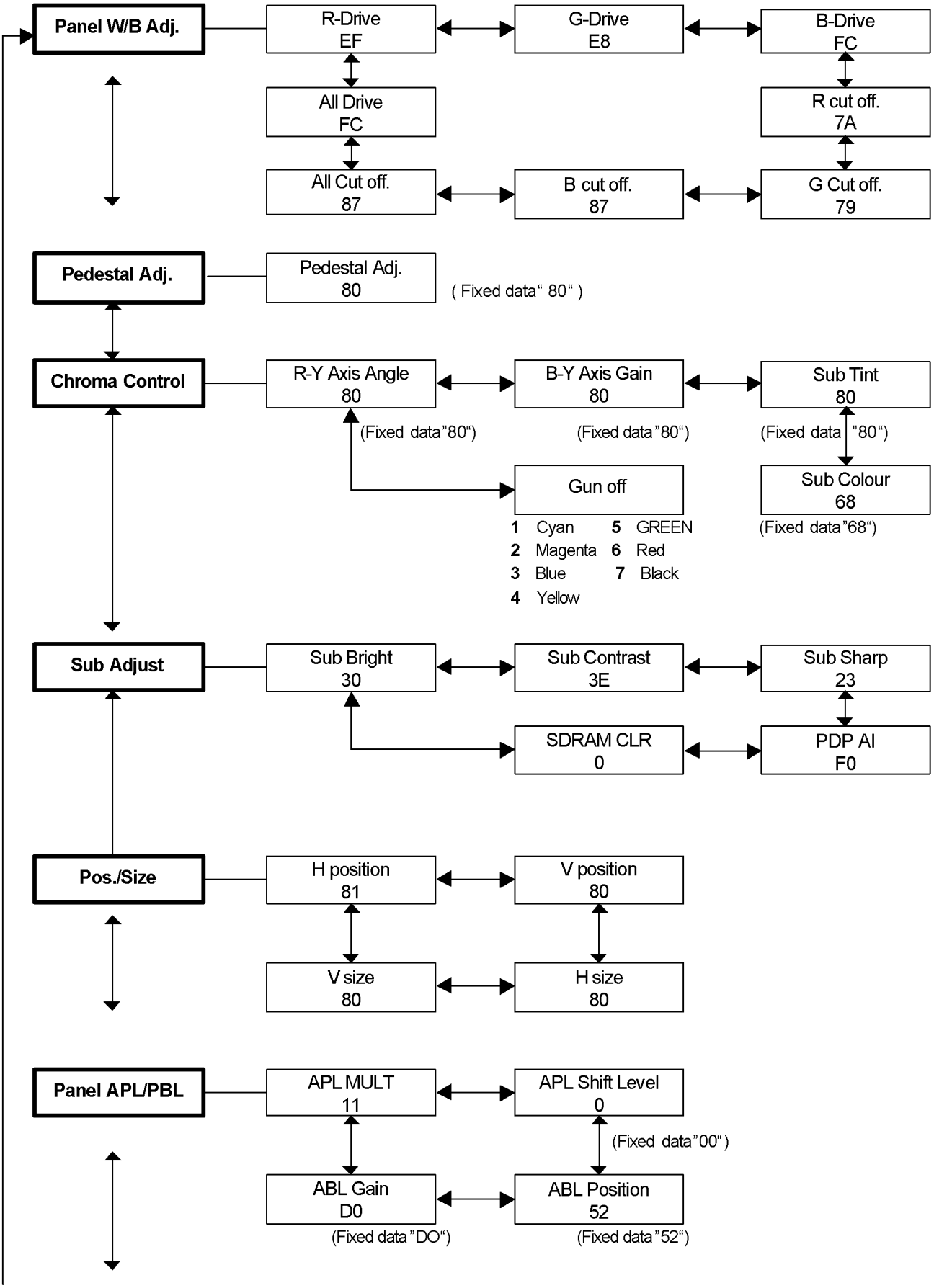


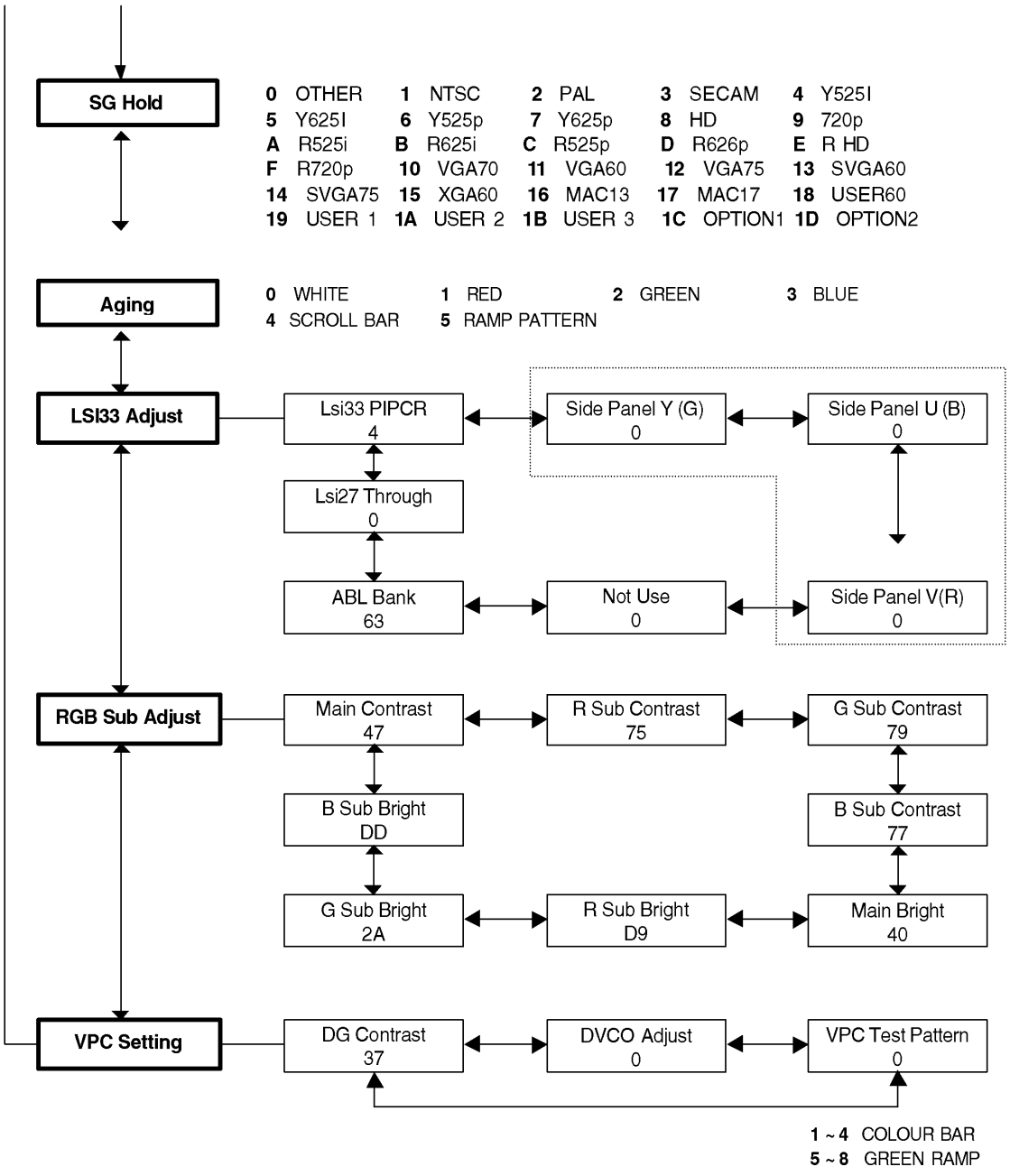
5. Adjust optimum setting by Volume Up / + and Down / - buttons.

4.2. Exit

1. To exit the **IIC mode**, press the **R** button on the remote control.
2. To exit the **CAT mode**, access the **ID mode** by the down button of cross buttons and switch off the main power and on again.

4.3. IIC menu structure

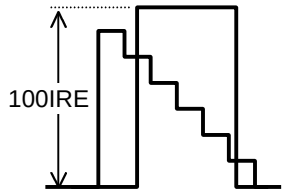



SG Hold
0 OTHER 1 NTSC 2 PAL 3 SECAM 4 Y525I
5 Y625I 6 Y525p 7 Y625p 8 HD 9 720p
A R525i B R625i C R525p D R626p E R HD
F R720p 10 VGA70 11 VGA60 12 VGA75 13 SVGA60
14 SVGA75 15 XGA60 16 MAC13 17 MAC17 18 USER60
19 USER 1 1A USER 2 1B USER 3 1C OPTION1 1D OPTION2
Aging
0 WHITE 1 RED 2 GREEN 3 BLUE
4 SCROLL BAR 5 RAMP PATTERN
LSI33 Adjust
Lsi33 PIPCR 4
Side Panel Y (G) 0
Side Panel U (B) 0
Lsi27 Through 0
ABL Bank 63
Not Use 0
Side Panel V(R) 0
RGB Sub Adjust
Main Contrast 47
R Sub Contrast 75
G Sub Contrast 79
B Sub Bright DD
B Sub Contrast 77
G Sub Bright 2A
R Sub Bright D9
Main Bright 40
VPC Setting
DG Contrast 37
DVCO Adjust 0
VPC Test Pattern 0
1 ~ 4 COLOUR BAR
5 ~ 8 GREEN RAMP

5 Alignment

5.1. DG contrast

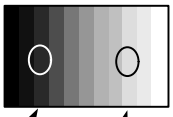
(Composit video signal)

	INPUT	Equipment	Test Point	Alignment menu		Level	Remark
				Subject	Item		
1	NTSC Colour Bar	Oscilloscope	TP8004 (DG Boad)	VPC SETTING	DG CONTRAST	0.7V+-0.02V (3A)	
2	PAL Colour Bar	Oscilloscope	TP8004 (DG Board)	VPC SETTING	DG CONTRAST	0.55V+-0.02V (3A)	

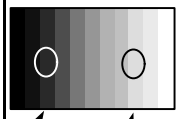
5.2. DVCO adjust

	INPUT	Equipment	Test Point	Alignment menu		Procedure
				Subject	Item	
1	NTSC or PAL Colour Bar Standard signal	-	-	VPC SETTING	DVCO SETTING	1) Access to DVCO SETTING mode. 2) Press ACCESS key on remote then automatic DVCO setting is started. 3) When data becomes " 1 "adjustment is completed. . * Do not use this function without input signal.

5.3. NTSC panel white balance

	INPUT	Equipment	Setting	Alignment menu	Procedure
1	NTSC Gray Scale Pattern  High light 75% Low light 15%	Color Analyzer	Picture: Normal White balance: **Cool** Aspect: 16:9	Sub Adjust Sub Bright PANEL W/B G cut off PANEL W/B B cut off R cut off Sub Adjust Sub Bright PANEL W/B G Drive PANEL W/B B Drive R Drive PANEL W/B R,G,B Drive R,G,B Drive PANEL W/B R,G,B cut off	1) Find the nearest area to brightness of 10 cd/m2 as Low light by color sensor. 2) Adjust Sub bright to set Low light level to 10 cd/m2 exactly. 3) Set G cut off to " 80 ". 4) Adjust B and R cut off to set color temperature as shown Fig.-01. 5) If Sub Bright is changed re-adjust it to set Low light to 10 cd/m2. 6)Find 75% of white area by color sensor. 7) Set G Drive to " D8 ". 8) Adjust B and R Drive to set color temperature as shown Fig.-01. 9) Repeat item 4) to 7) to set both Low light and high light. 10) Increase same steps of R, G and B Drive to set largest level of 3 color drive to "FC". 11) Re-adjust Low light level again. Color Temp. / x / y Cool(Hi) 0.272 0.290 Normal(Mid) 0.288 0.296 Warm(Low) 0.313 0.329 Fig. -01
2			Picture: Normal White balance: **Normal** Aspect: 16:9	PANEL W/B R,G,B cut off PANEL W/B R,G,B Drive	1) Change white balance to "Normal". 2) Repeat procedure 3) to 11) of Cool mode.
3			Picture: Normal White balance: **Warm** Aspect: 16:9	PANEL W/B R,G,B cut off PANEL W/B R,G,B Drive	1) Change white balance to "Normal". 2) Repeat procedure 3) to 11) of Cool mode.
4			Picture: Normal White balance: **Cool** Aspect: 16:9	Picture Menu Sub Adjust Sub Bright	1) Change color templature to "Cool". 2)Re-set Sub bright to "30"

5.4. PAL/SECAM panel white balance

	INPUT	Equipment	Setting	Alignment menu	Procedure
1	PAL Gray Scale Pattern  	Color Analyzer	Picture: Normal White balance: **Cool** Aspect: 16:9	Sub Adjust Sub Bright PANEL W/B G cut off PANEL W/B B cut off R cut off Sub Adjust Sub Bright PANEL W/B G Drive PANEL W/B B Drive R Drive PANEL W/B R,G,B Drive R,G,B Drive PANEL W/B R,G,B cut off	1) Find the nearest area to brightness of 10 cd/m2 as Low light by color sensor. 2) Adjust Sub bright to set Low light level to 10 cd/m2 exactly. 3) Set G cut off to " 80 ". 4) Adjust B and R cut off to set color temperature as shown Fig.-02. 5) If Sub Bright is changed re-adjust it to set Low light to 10 cd/m2. 6)Find 75% of white area by color sensor. 7) Set G Drive to " D8 ". 8) Adjust B and R Drive to set color temperature as shown Fig.-02. 9) Repeat procedure 4) to 7) to set both Low light and high light. 10) Increase same steps of R, G and B Drive to set largest level of 3 color drive to "FC". 11) Re-adjust Low light level again. Color Temp. / x / y Cool(Hi) / 0.272 / 0.290 Normal(Mid) / 0.288 / 0.296 Warm(Low) / 0.313 / 0.329 Fig. -02
2			Picture: Normal White balance: **Normal** Aspect: 16:9	PANEL W/B R,G,B cut off PANEL W/B R,G,B Drive	1) Change white balance to "Normal". 2) Repeat procedure 3) to 11) of Cool mode.
3			Picture: Normal White balance: **Warm** Aspect: 16:9	PANEL W/B R,G,B cut off PANEL W/B R,G,B Drive	1) Change white balance to "Normal". 2) Repeat procedure 3) to 11) of Cool mode.
4			Picture: Normal White balance: **Cool** Aspect: 16:9	Picture Menu Sub Adjust Sub Bright	1) Change color templature to "Cool". 2)Re-set Sub bright to "30"

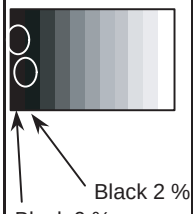
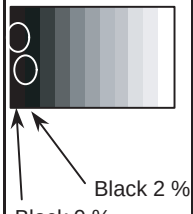
<table>
<tr><th></th><th></th><th>Equipment</th><th>Setting</th><th>Alignment menu</th><th>Procedure</th></tr>
<tr><td>5</td><td>SECAM signal</td><td></td><td>Picture:
Normal
Aspect:
16:9

White balance:
Cool
Normal
Warm</td><td></td><td>1) Write down each color temaparature of R,G,B drive and Cut off data as follows.

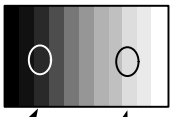
<table><tr><th>White Balance</th><th>Cool</th><th>Normal</th><th>Warm</th></tr><tr><td>R Drive</td><td></td><td></td><td></td></tr><tr><td>G Drive</td><td></td><td></td><td></td></tr><tr><td>B Drive</td><td></td><td></td><td></td></tr><tr><td>R Cut off</td><td></td><td></td><td></td></tr><tr><td>G Cut off</td><td></td><td></td><td></td></tr><tr><td>B Cut off</td><td></td><td></td><td></td></tr></table>
2) Input SECAM signal.

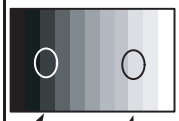
3) Copy PAL R,G,B drive and cut off data of each white balance mode to SECAM position.</td></tr>
</table>

5.5. Pedestal setting

	INPUT	Equipment	Setting	Alignment menu	Procedure
1	Component (525i, 525p, 625i, 720i or 1080i) Gray Scale Pattern  		Picture: Normal White balance: **Cool** Aspect: 16:9	PANEL W/B R cut off G cut off B cut off Chroma Control: Gun off RGB Sub Adjust: G Sub Bright Chroma Control: Gun off RGB Sub Adjust: B Sub Bright Chroma Control: Gun off RGB Sub Adjust: R Sub Bright	** Adjust at the dark room. 1) Set R,G and B cut off to " **80** ". 2) Set Gun off to "**5**". (Only green pixels can emit.) 3) Adjust G Sub bright to start some of green pixels emission at black 2% area and no emission at black 0% area. 4) Set Gun off to "**3**". (Only blue pixels can emit.) 5) Adjust B Sub bright to start some of blue pixels emission at black 2% area and no emission at black 0% area. 6) Set Gun off to "**6**". (Only red pixels can emit.) 7) Adjust R Sub bright to start some of red pixels emission at black 2% area and no emission at black 0% area.
2	RGB(PC) Gray Scale Pattern  		Picture: Normal White balance: **Cool** Aspect: 16:9	PANEL W/B R,G,B cut off PANEL W/B R,G,B Drive	1) Change input to RGB signal. 2) Repeat procedure 1) to 7) of Component input signal.

5.6. PC/RGB panel white balance

	INPUT	Equipment	Setting	Alignment menu	Procedure
1	PC Gray Scale Pattern  High light 75% Low light 15%	Color Analyzer	Picture: Normal White balance: **Cool** Aspect: 16:9	Sub Adjust Sub Bright PANEL W/B G cut off PANEL W/B B cut off R cut off Sub Adjust Sub Bright PANEL W/B G Drive PANEL W/B B Drive R Drive PANEL W/B R,G,B Drive R,G,B Drive PANEL W/B R,G,B cut off	1) Find the nearest area to brightness of 10 cd/m2 as Low light by color sensor. 2) Adjust Sub bright to set Low light level to 10 cd/m2 exactly. 3) Set G cut off to " 80 ". 4) Adjust B and R cut off to set color temperature as shown Fig.-03. 5) If Sub Bright is changed re-adjust it to set Low light to 10 cd/m2. 6)Find 75% of white area by color sensor. 7) Set G Drive to " D8 ". 8) Adjust B and R Drive to set color temperature as shown Fig.-03. 9) Repeat item 4) to 7) to set both Low light and high light. 10) Increase same steps of R, G and B Drive to set largest level of 3 color drive to "FC". 11) Re-adjust Low light level again. Color Temp. / x / y Cool(Hi) / 0.272 / 0.290 Normal(Mid) / 0.288 / 0.296 Warm(Low) / 0.313 / 0.329 Fig. -03
2			Picture: Normal White balance: **Normal** Aspect: 16:9	PANEL W/B R,G,B cut off PANEL W/B R,G,B Drive	1) Change white balance to "Normal". 2) Repeat procedure 3) to 11) of Cool mode.
3			Picture: Normal White balance: **Warm** Aspect: 16:9	PANEL W/B R,G,B cut off PANEL W/B R,G,B Drive	1) Change white balance to "Normal". 2) Repeat procedure 3) to 11) of Cool mode.
4			Picture: Normal White balance: **Cool** Aspect: 16:9	Picture Menu Sub Adjust Sub Bright	1) Change color templature to "Cool". 2)Re-set Sub bright to "30"

<table>
<tr><th></th><th>INPUT</th><th>Equipment</th><th>Setting</th><th>Alignment menu</th><th>Procedure</th></tr>
<tr>
<td>5</td>
<td>RGB
Gray Scale
Pattern
 
High light 75%
Low light 15%</td>
<td></td>
<td>Picture:
Normal
Aspect:
16:9

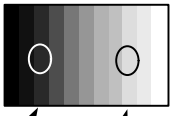
White balance:
Cool
Normal
Warm</td>
<td></td>
<td>1) Write down each color temaparature of R,G,B drive and Cut off data as follows.

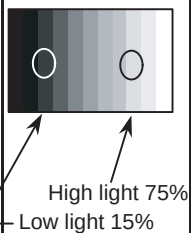
<table>
<tr><th>White Balance</th><th>Cool</th><th>Normal</th><th>Warm</th></tr>
<tr><td>R Drive</td><td></td><td></td><td></td></tr>
<tr><td>G Drive</td><td></td><td></td><td></td></tr>
<tr><td>B Drive</td><td></td><td></td><td></td></tr>
<tr><td>R Cut off</td><td></td><td></td><td></td></tr>
<tr><td>G Cut off</td><td></td><td></td><td></td></tr>
<tr><td>B Cut off</td><td></td><td></td><td></td></tr>
</table>

2) Input RGB signal.

3) Copy PC R,G,B drive and cut off data of each white balance mode to RGB position.</td>
</tr>
</table>

5.7. HD/ 525i /525p panel white balance

	INPUT	Equipment	Setting	Alignment menu	Procedure
1	HD (720i or 1080i) Gray Scale Pattern  	Color Analyzer	Picture: Normal White balance: **Cool** Aspect: 16:9	Sub Adjust Sub Bright PANEL W/B G cut off PANEL W/B B cut off R cut off Sub Adjust Sub Bright PANEL W/B G Drive PANEL W/B B Drive R Drive PANEL W/B R,G,B Drive R,G,B Drive PANEL W/B R,G,B cut off	1) Find the nearest area to brightness of 10 cd/m2 as Low light by color sensor. 2) Adjust Sub bright to set Low light level to 10 cd/m2 exactly. 3) Set G cut off to " 80 ". 4) Adjust B and R cut off to set color temperature as shown Fig.-04. 5) If Sub Bright is changed re-adjust it to set Low light to 10 cd/m2. 6)Find 75% of white area by color sensor. 7) Set G Drive to " D8 ". 8) Adjust B and R Drive to set color temperature as shown Fig.-04. 9) Repeat item 4) to 7) to set both Low light and high light. 10) Increase same steps of R, G and B Drive to set largest level of 3 color drive to "FC". 11) Re-adjust Low light level again. Color Temp. / x / y Cool(Hi) / 0.272 / 0.290 Normal(Mid) / 0.288 / 0.296 Warm(Low) / 0.313 / 0.329 Fig. -04
2			Picture: Normal White balance: **Normal** Aspect: 16:9	PANEL W/B R,G,B cut off PANEL W/B R,G,B Drive	1) Change white balance to "Normal". 2) Repeat procedure 3) to 11) of Cool mode.
3			Picture: Normal White balance: **Warm** Aspect: 16:9	PANEL W/B R,G,B cut off PANEL W/B R,G,B Drive	1) Change white balance to "Normal". 2) Repeat procedure 3) to 11) of Cool mode.
4			Picture: Normal White balance: **Cool** Aspect: 16:9	Picture Menu Sub Adjust Sub Bright	1) Change color templature to "Cool". 2)Re-set Sub bright to "30"

<table>
<tr><th></th><th>INPUT</th><th>Equipment</th><th>Setting</th><th>Alignment menu</th><th>Procedure</th></tr>
<tr>
<td>5</td>
<td>RGB
Gray Scale
Pattern
 
</td>
<td></td>
<td>Picture:
Normal
Aspect:
16:9

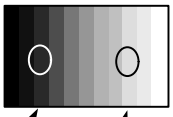
White balance:
Cool
Normal
Warm</td>
<td></td>
<td>1) Write down each color temaparature of R,G,B drive and Cut off data as follows.

<table>
<tr><th>White Balance</th><th>Cool</th><th>Normal</th><th>Warm</th></tr>
<tr><td>R Drive</td><td></td><td></td><td></td></tr>
<tr><td>G Drive</td><td></td><td></td><td></td></tr>
<tr><td>B Drive</td><td></td><td></td><td></td></tr>
<tr><td>R Cut off</td><td></td><td></td><td></td></tr>
<tr><td>G Cut off</td><td></td><td></td><td></td></tr>
<tr><td>B Cut off</td><td></td><td></td><td></td></tr>
</table>

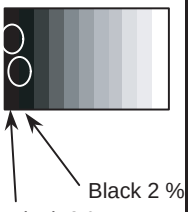
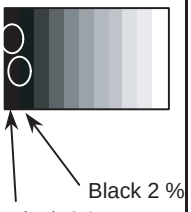
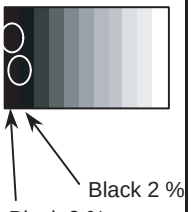
2)Change input signal to 525i and 525p.

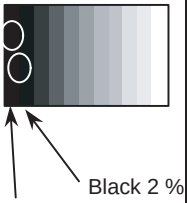
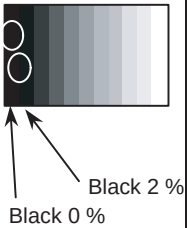
3) Copy HD drive and cut off data of each white balance mode to each signals position.</td>
</tr>
</table>

5.8. 625i panel balance

	INPUT	Equipment	Setting	Alignment menu	Procedure
1	625i Gray Scale Pattern  High light 75% Low light 15%	Color Analyzer	Picture: Normal White balance: **Cool** Aspect: 16:9	Sub Adjust Sub Bright PANEL W/B G cut off PANEL W/B B cut off R cut off Sub Adjust Sub Bright PANEL W/B G Drive PANEL W/B B Drive R Drive PANEL W/B R,G,B Drive R,G,B Drive PANEL W/B R,G,B cut off	1) Find the nearest area to brightness of 10 cd/m2 as Low light by color sensor. 2) Adjust Sub bright to set Low light level to 10 cd/m2 exactly. 3) Set G cut off to " 80 ". 4) Adjust B and R cut off to set color temperature as shown Fig.-05. 5) If Sub Bright is changed re-adjust it to set Low light to 10 cd/m2. 6)Find 75% of white area by color sensor. 7) Set G Drive to " D8 ". 8) Adjust B and R Drive to set color temperature as shown Fig.-05. 9) Repeat item 4) to 7) to set both Low light and high light. 10) Increase same steps of R, G and B Drive to set largest level of 3 color drive to "FC". 11) Re-adjust Low light level again. Color Temp. / x / y Cool(Hi) / 0.272 / 0.290 Normal(Mid) / 0.288 / 0.296 Warm(Low) / 0.313 / 0.329 Fig. -05
2			Picture: Normal White balance: **Normal** Aspect: 16:9	PANEL W/B R,G,B cut off PANEL W/B R,G,B Drive	1) Change white balance to "Normal". 2) Repeat procedure 3) to 11) of Cool mode.
3			Picture: Normal White balance: **Warm** Aspect: 16:9	PANEL W/B R,G,B cut off PANEL W/B R,G,B Drive	1) Change white balance to "Normal". 2) Repeat procedure 3) to 11) of Cool mode.
4			Picture: Normal White balance: **Cool** Aspect: 16:9	Picture Menu Sub Adjust Sub Bright	1) Change color templature to "Cool". 2)Re-set Sub bright to "30"

5.9. Sub brighness setting

	INPUT	Equipment	Setting	Alignment menu	Procedure
1	NTSC Gray Scale Pattern  		Picture: Normal Aspect: 16:9	PANEL W/B All cut off	** Adjust at the dark room. 1) Set white balance to **Cool**. 2) Adjust All cut off to start some pixels emission at black 2% area and no emission at black 0% area. 3) Write down all cut off data. 4) Set white balance to **Nornal**. 5) Adjust All cut off to set same data of Cool mode. 6) Set white balance to **warm**. 7) Adjust All cut off to set same data of Cool mode.
2	PAL Gray Scale Pattern  		Picture: Normal Aspect: 16:9	PANEL W/B All cut off	** Adjust at the dark room. 1) Set white balance to **Cool**. 2) Adjust All cut off to start some pixels emission at black 2% area and no emission at black 0% area. 3) Write down all cut off data. 4) Set white balance to **Nornal**. 5) Adjust All cut off to set same data of Cool mode. 6) Set white balance to **warm**. 7) Adjust All cut off to set same data of Cool mode.
	SECAM Gray Scale Pattern				8) Change to SECAM signal. 9) Copy PAL All cut off data to SECAM mode.
3	PC Gray Scale Pattern  		Picture: Normal Aspect: 16:9	PANEL W/B All cut off	** Adjust at the dark room. 1) Set white balance to **Cool**. 2) Adjust All cut off to start some pixels emission at black 2% area and no emission at black 0% area. 3) Write down all cut off data. 4) Set white balance to **Nornal**. 5) Adjust All cut off to set same data of Cool mode. 6) Set white balance to **warm**. 7) Adjust All cut off to set same data of Cool mode.
	RGB Gray Scale Pattern				8) Change to RGB input signal. 9) Copy PAL All cut off data to SECAM mode.

	INPUT	Equipment	Setting	Alignment menu	Procedure
4	525i Gray Scale Pattern  		Picture: Normal Aspect: 16:9	PANEL W/B All cut off	** Adjust at the dark room. 1) Set white balance to **Cool**. 2) Adjust All cut off to start some pixels emission at black 2% area and no emission at black 0% area. 3) Write down all cut off data. 4) Set white balance to **Nornal**. 5) Adjust All cut off to set same data of Cool mode. 6) Set white balance to **warm**. 7) Adjust All cut off to set same data of Cool mode.
	525p Gray Scale Pattern				8) Change to 525p signal. 9) Copy 525i All cut off data to 525p mode.
	HD (720i or 1080i) Gray Scale Pattern				8) Change to HD signal. 9) Copy 525i All cut off data to HD mode.
5	625i Gray Scale Pattern  		Picture: Normal Aspect: 16:9	PANEL W/B All cut off	** Adjust at the dark room. 1) Set white balance to **Cool**. 2) Adjust All cut off to start some pixels emission at black 2% area and no emission at black 0% area. 3) Write down all cut off data. 4) Set white balance to **Nornal**. 5) Adjust All cut off to set same data of Cool mode. 6) Set white balance to **warm**. 7) Adjust All cut off to set same data of Cool mode.

5.10. Pos./Size setting

1. Receive the test pattern signal which can be found the center and edge position and align properly.

Alignment Item	Reference	Setting/Special feature
H Position	9A	Optimum setting
V Position	C3	Optimum setting
H Size	A8	Optimum setting
V Size	5E	Optimum setting

5.11. Panel APL/ABL

1. Confirm each data.

Alignment Item	Reference	Setting/Special feature
APL Shift Level	E2	Confirmation only
ABL Point	10	Confirmation only
ABL Gain	E0	Confirmation only
ABL Bank Select	3F	Confirmation only

5.12. SG Hold

SG Hold is the alignment tool for data copy function. Color / Signal system can be set regardless of input signal.

5.13. Aging

Aging mode is internal pattern generator for panel setting confirmation and the after image removal.

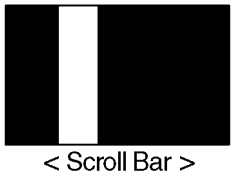
1. Access desired colour pattern by the Volume Up or Down button on the remote control.
2. To exit press Menu button

5.13.1. Panel Colour

There are 4 colour pattern White, Red, Blue and Green.

5.13.2. Scroll Bar

Scroll bar is for the after image removal. Display scroll bar approximately 15 minutes after alignment is competed.



< Scroll Bar >

5.13.3. Ramp pattern

Ramp pattern is for digital contrast reproduction confirmation.

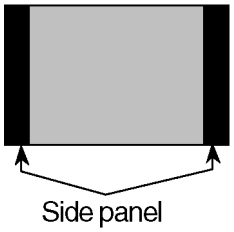
< Ramp pattern >

5.14. LSI 33 Adjust

LSI 33 PIPCR, LSI 27 Through and ABL Bank are for factory parameter setting for Format converter (IC9204).

5.14.1. Side panel color setting

Colour of side panel which are left and right side blank area of 4:3 aspect mode can be adjusted as desired color and brightness.

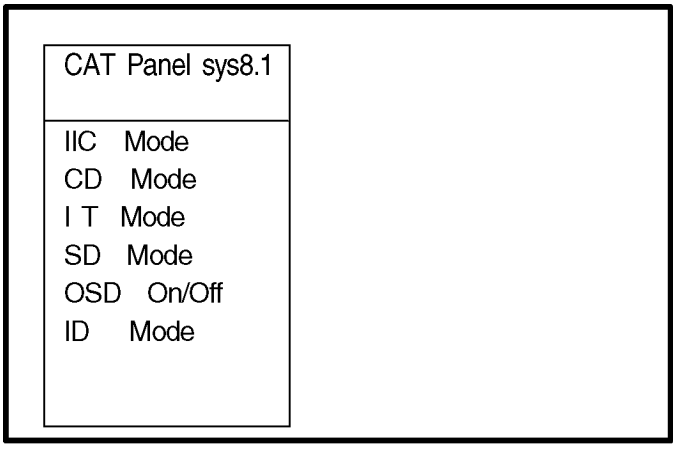


1. Access Side panel Y(G), U(B) and V(R) by the left or right button on the remote control.
2. Adjust desired color and brightness of side panel Y(G), U(B) and V(R) by Volume UP or Down button on the remote control.

   (If 4:3 aspect will be used long time, change side panel brightness optimum level for screen burn protection.)

5.15. CAT (Computer Aided Test) mode

Mode	Function	Access button
IIC	Service Alignment	Action
CD (Complete Diagnostics)	Software version information EEP ROM edit	Mute
IT (Integrated Text)	Not use	
SD (Status Display)	Factory use	Action
OSD on/off	OSD display switch	Mute
ID (Initial Data)	Not use	

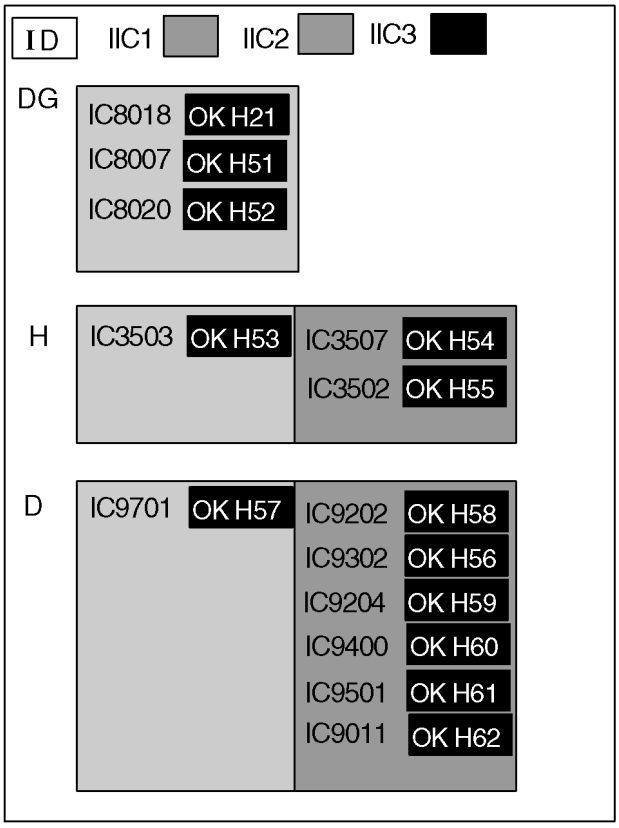


(IT Mode, and ID Mode is unused in serving.)

6 Self Check

6.1. Display Indication

1. Self-check is used to automatically check the bus line controlled circuit of the Plasma display.
2. To get into the Self-check mode press the volume down button on the customer controls at the front of the set, at the same time pressing the OFF-TIMER button on the remote control, and the screen will show :-



If the CCU ports have been checked and found to be incorrect Or not located then " - - " will appear in place of " OK "

7 Trouble shooting guide

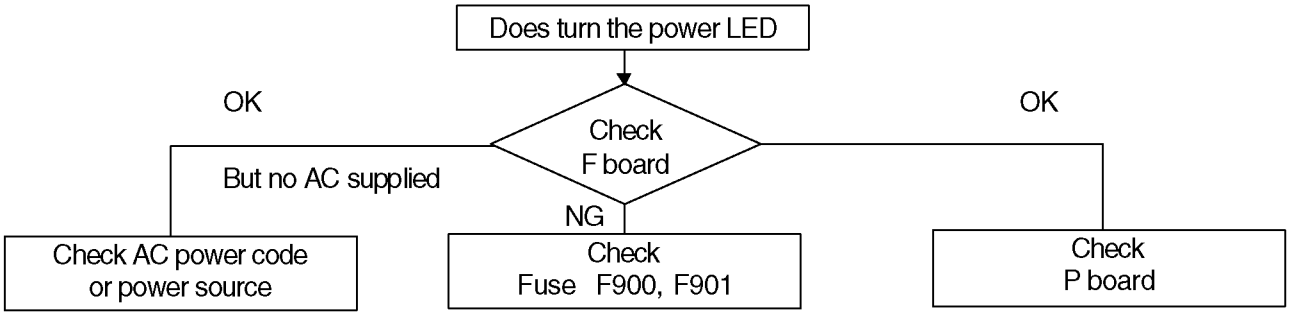
7.1. No Power

First check point

There are following 3 states of No Power indication by power LED.

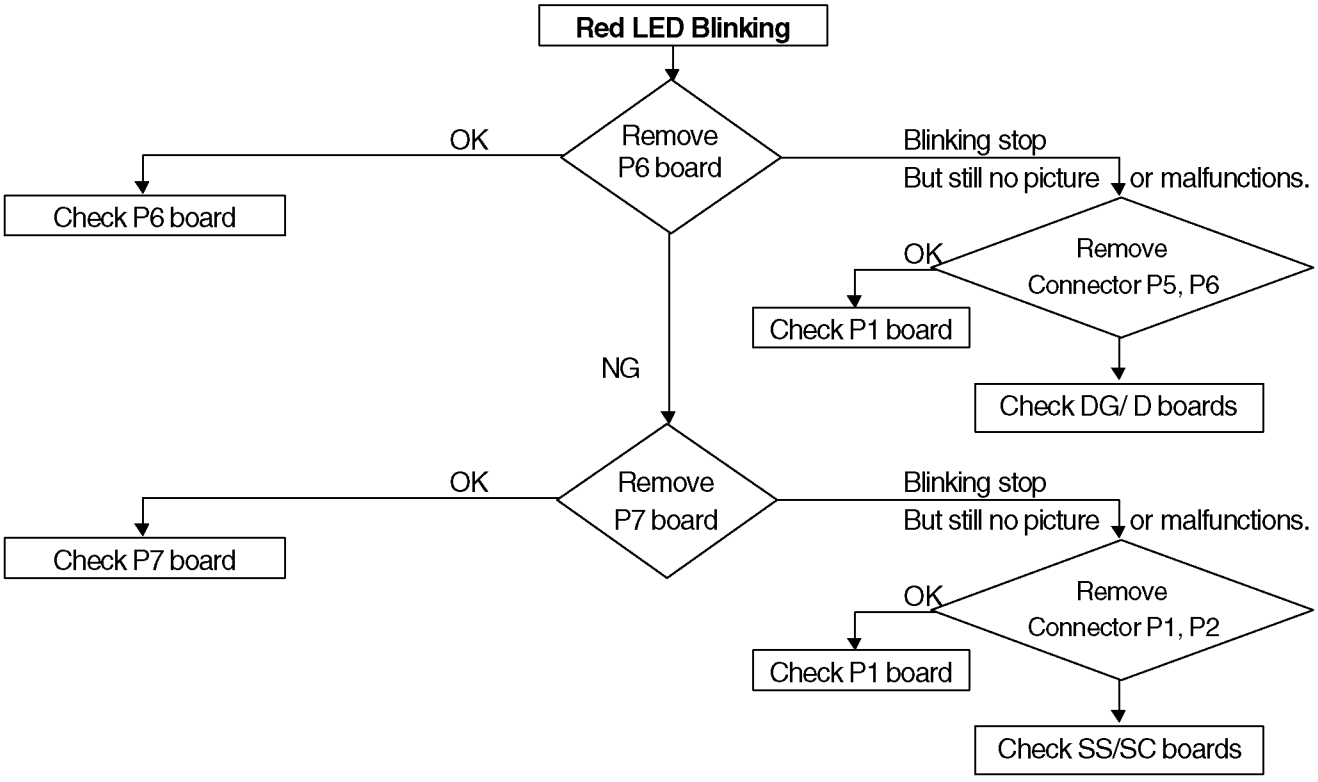
1. No lit
2. Green is lit then turns red blinking a few seconds later.
3. Only red is lit.

1. No lit

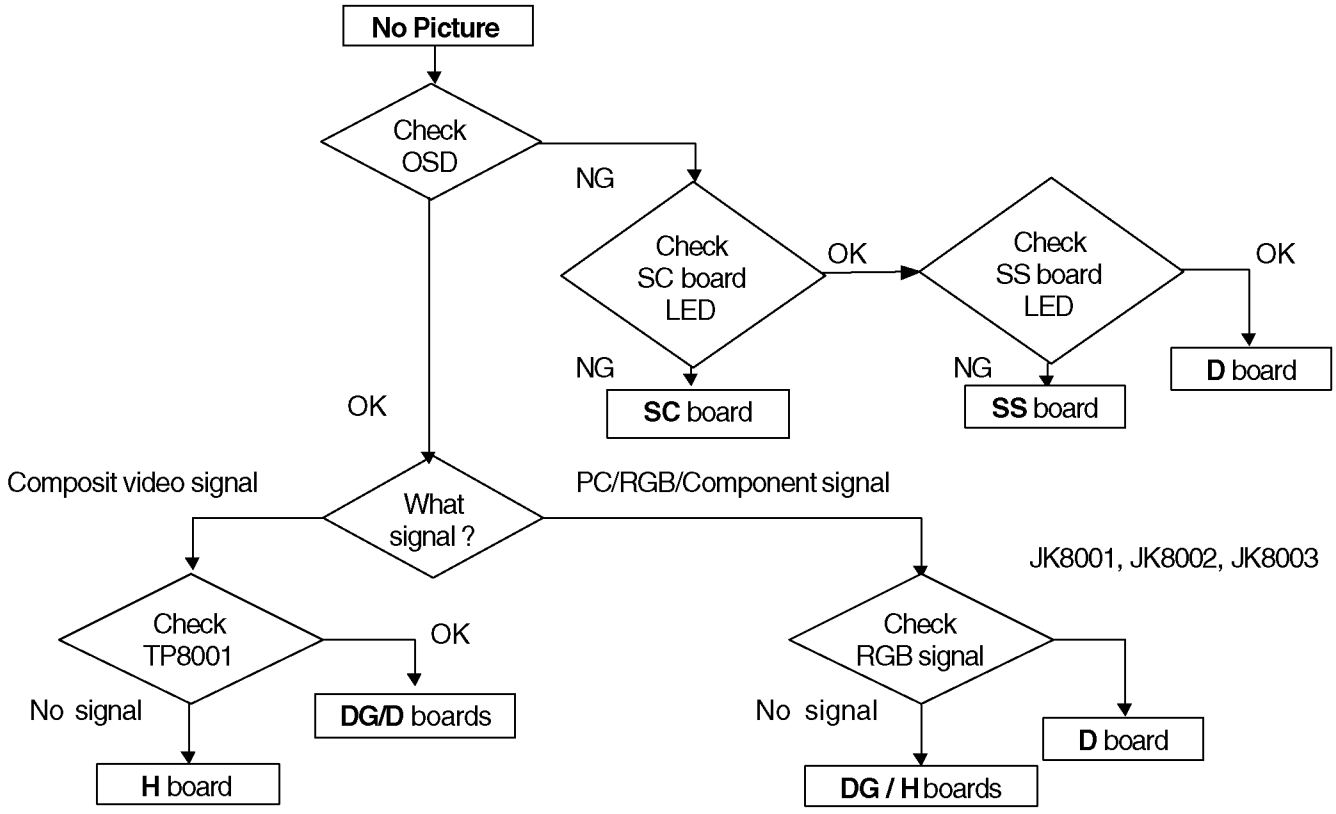


2. Red LED Blinking

When one or some of supply voltages from power supply circuit are declined red LED will be blinking as power

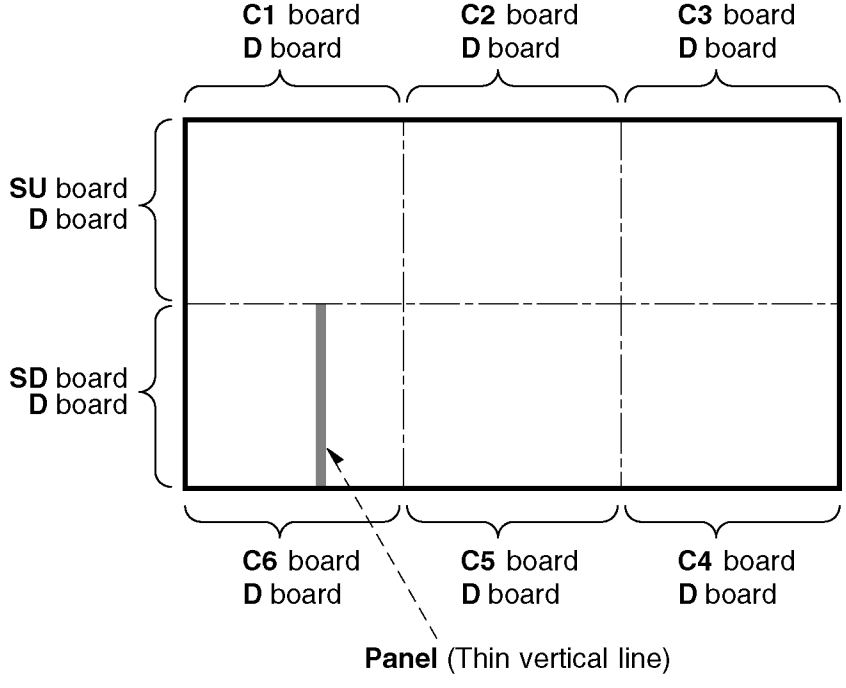


7.2. No Picture



7.3. Local screen failure

Plasma display may have local area failure on the screen. Fig - 1 is the possible defect P.C.B. for each local area.



<Local screen failure chart>

Fig - 1

8 P.C.B. (Printed Circuit Board) exchange

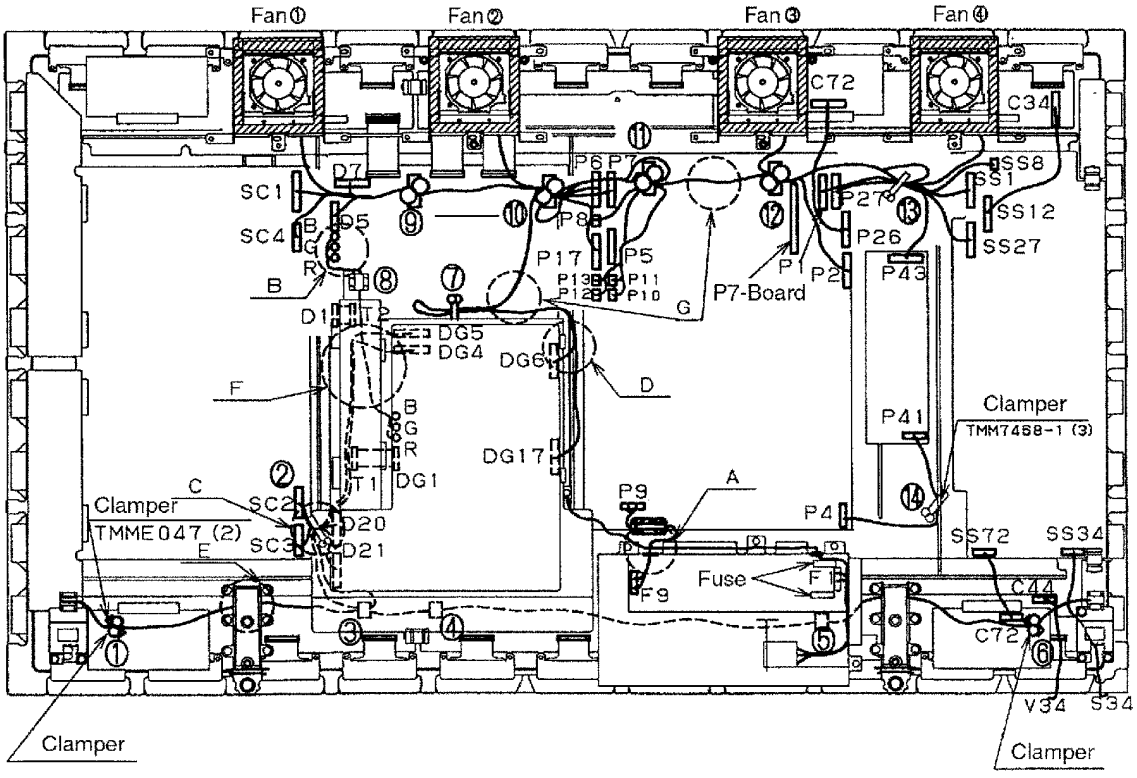
8.1. Caution

1. To remove P.C.B. , wait 1 minute after power was off for discharge from electrolysis capacitors.

8.2. Quick adjustment after P.C.B. exchange

P.C.B.	Item	Volume	Test point	Level
P board	Vsus	R639	TPVsus (SS)	Vsus ± 1 V
	Vbk	R513	TPVBK (SC)	140V ± 5 V
	Vda	R528	P27 connector pin2	75V ± 0.5 V
	PFC	R548	P4 connector pin 1	400V ± 1 V
DG board	DG contrast	DG contrast	TP8004(DG)	Refer to the alignment procedure
	DVCO	DVCO adjust		Automatic
SC board	Vset	R6940	TPSET(SC)	224V ± 1 V
	Vad	R960	TPVAD	VAD ± 1 V
SS board	Ve	R6829	TPVE	VE ± 1 V
D board	White balance, Pedestal and Sub brightness for NTSC, PAL, HD, PC and 625I signals.			

9 Location of Lead Wiring

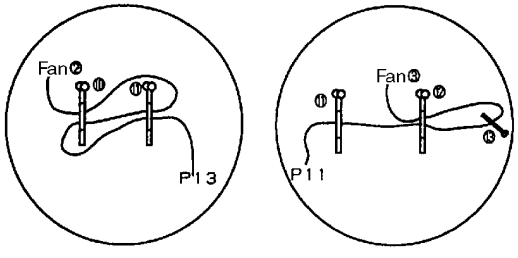


CON:NO — CON:NO	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭
DBGR — DGBGR								○						○
P4 — P41														
SC1 — P2									○	○	○	○		
P5 — D5									○	○				
P7 — D7									○	○				
SS1 — P1													○	
SS8 — P8											○	○	○	
SS27 — P27													○	
DG17 — P17							◎			○				
DG6 — P6							◎			○				
DG4 — H37 (SS)		○	○	○	○	○								
DG5 — H37 (SC)		○	○											
SC4 — P43									○	○	○	○	○	
Fan① — P10~P13									○	○	○			
Fan② — P10~P13									◎	◎				
Fan③ — P10~P13											○	◎	○	
Fan④ — P10~P13											○	○	○	

Connector Connection ◎:Wind up second times.

P9, AC inlet, BGR, DG4, DG5, D1, T2, T1, DG1, P6, P8, P17, P7, P5, P1, P2, P27, P26, P43, P4, SS34, C44, P13 P12, P11, P10

Location of Fan Lead Wiring

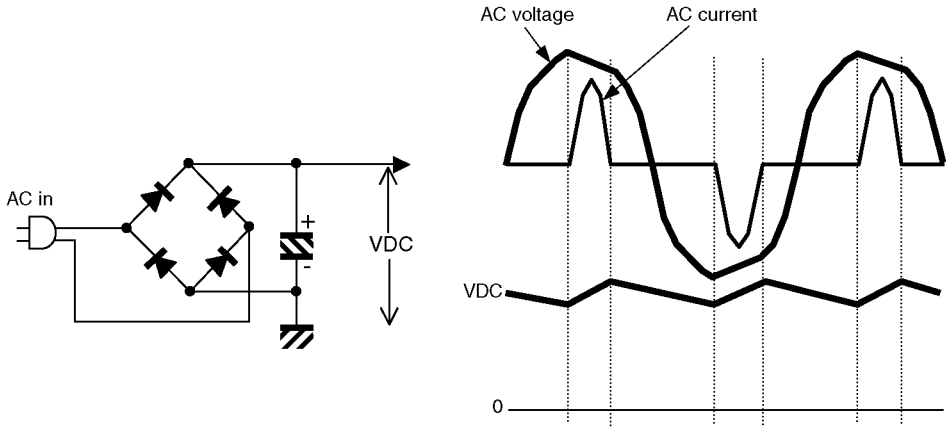


10 Basic Circuit Explanation

10.1. Power Supply Circuit

10.1.1. Power Factor Control (PFC)

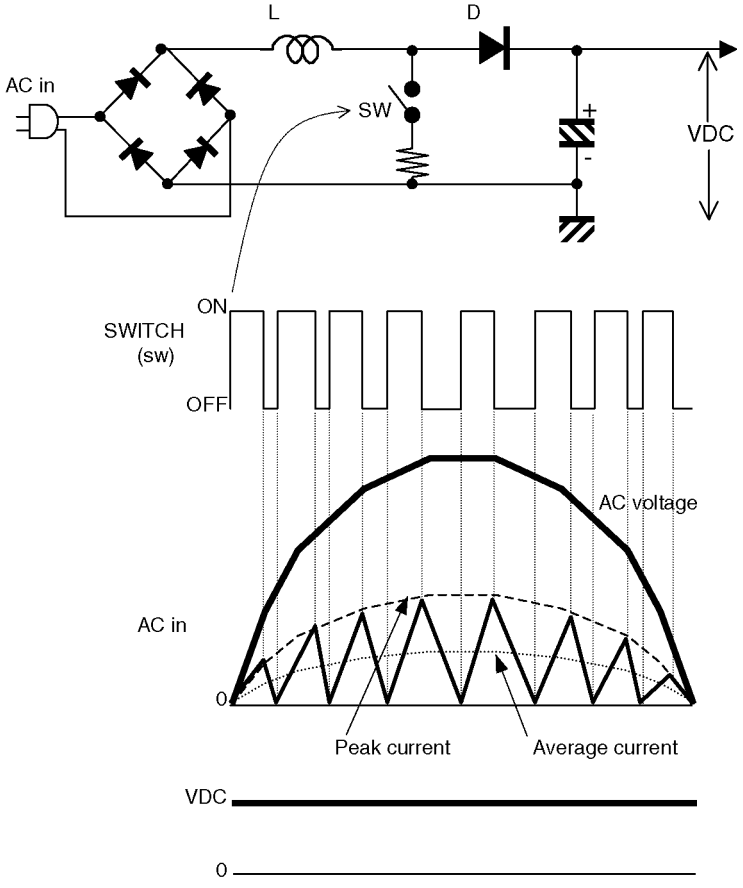
10.1.1.1. Basic operation of the Full wave bridge rectifier



Feature:

1. Power Factor 05~0.7
2. Spick AC current with high frequency component.

10.1.1.2. Power Factor control circuit



Feature:

1. Power Factor More than 0.9
2. Automatic Power Factor Control by OFF period change
3. Lower high frequency noise.

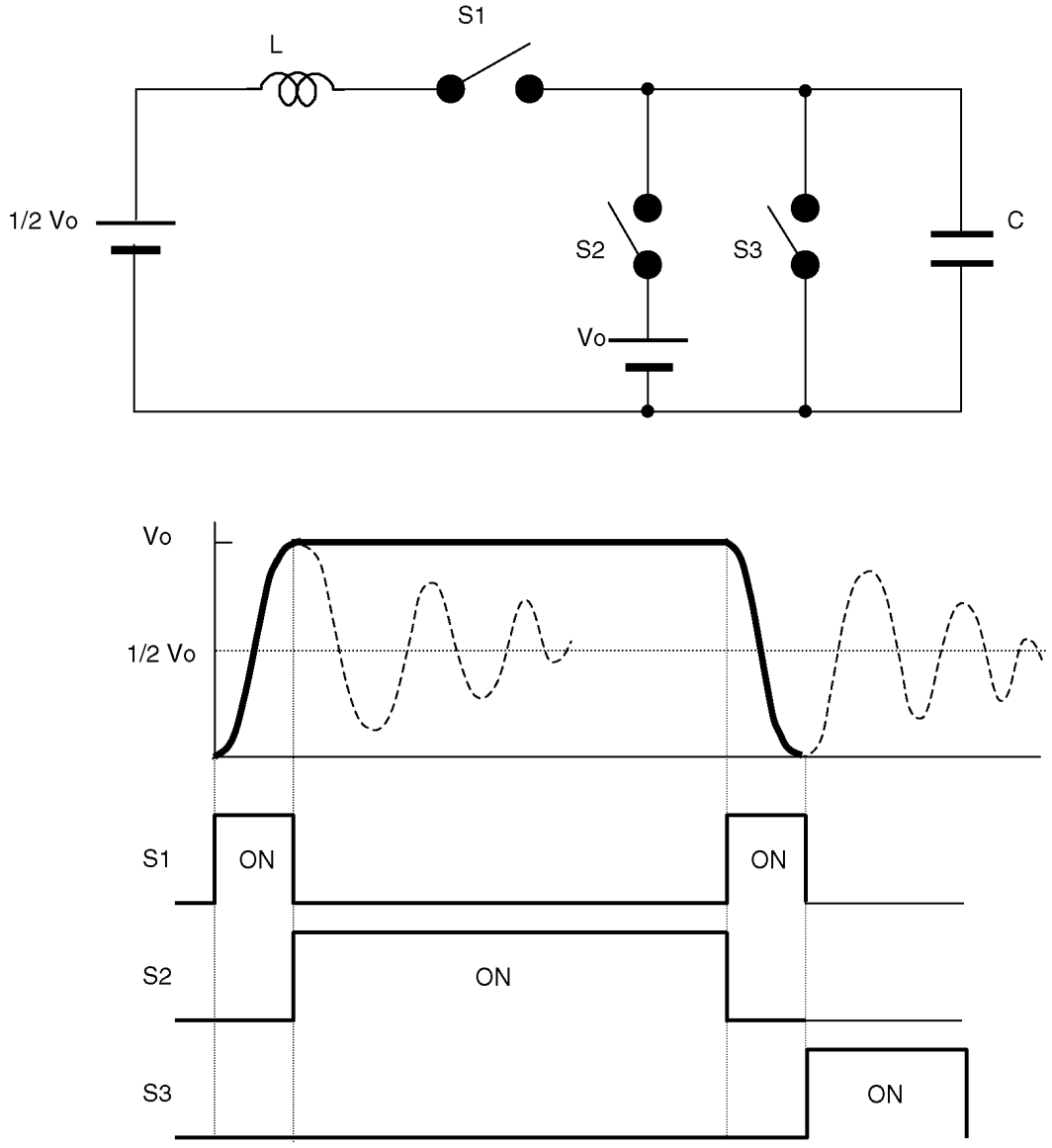
10.2. Energy Recovery Drive Pulse Output

10.2.1. Plasma Panel Energy Loss

When The Sustain, Scan and Data drive pulses are supplied to the plasma panel a lot of energy was lost by resistance of the electrodes lead and many of switching elements. Because plasma panel has the stray capacitance and this capacitance makes high level inrush current during the charge and dischange.
This energy loss becomes high temperature from the plasma panel itself.

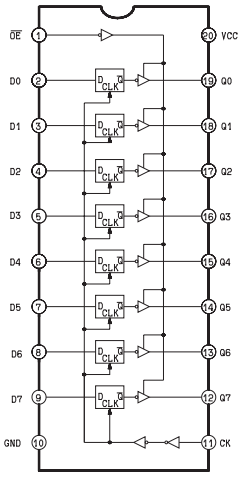
10.2.2. Energy Recovery circuit

10.2.2.1. Basic operation of the energy recover circuit



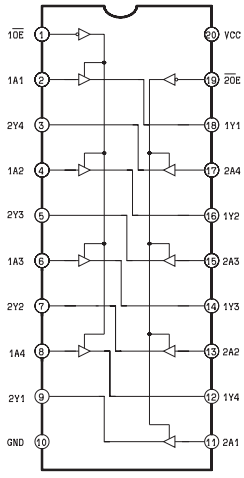
11 IC Block Diagram

C0JBAF000405
TC74LCX574F
(D-TYPE FLIP-FLOP)



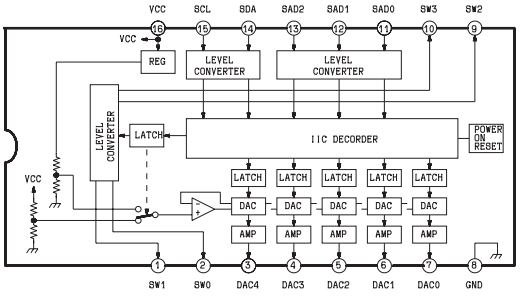
INPUTS			OUTPUTS
OE	CK	D	
H	X	X	Z
L	L	X	ON
L	L	L	L
L	L	H	H

C0JBAZ001201
TC74HC244AF
(BUS BUFFER)

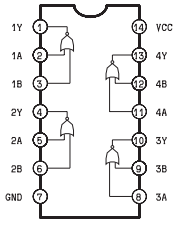


INPUTS		OUTPUTS
OE	An	
L	L	L
L	H	H
H	X	Z

CXA1315M
(IIC-DAC CONVERTER)

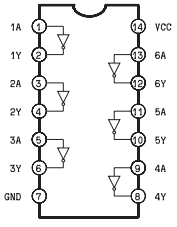


C0JBAD000080
(QUAD 2-INPUT
NOR GATE)



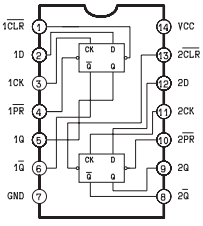
A	B	Y
L	L	H
L	H	L
H	L	L
H	H	L

C0JBAB000155
C0JBAB000226
(HEX SCHMITT
INVERTER)



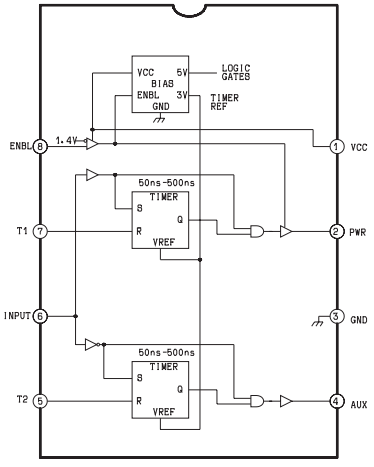
A	Y
L	H
H	L

TC74LCX74F

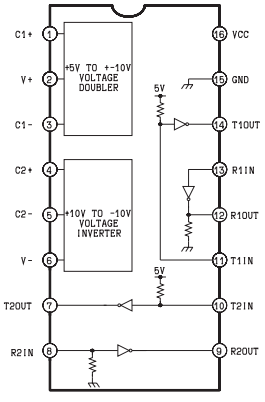


INPUTS				OUTPUTS		NO CHANGE
CLR	PR	D	CK	Q	Q	
L	H	X	X	L	H	CLEAR
H	L	X	X	H	L	PRESET
K	L	X	X	H	H	—
H	H	L	↓	L	H	—
H	H	H	↓	H	L	—
H	H	X	—	Qn	Qn	NO CHANGE

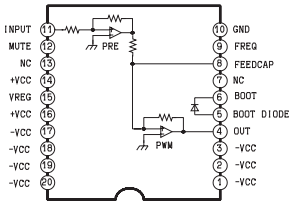
UC2715N
(FET DRIVER)



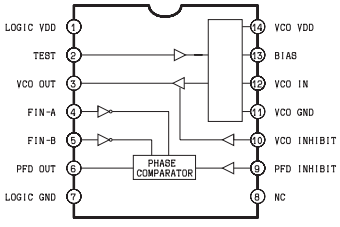
C0ZBZ0000205
(RS232C DRIVER)



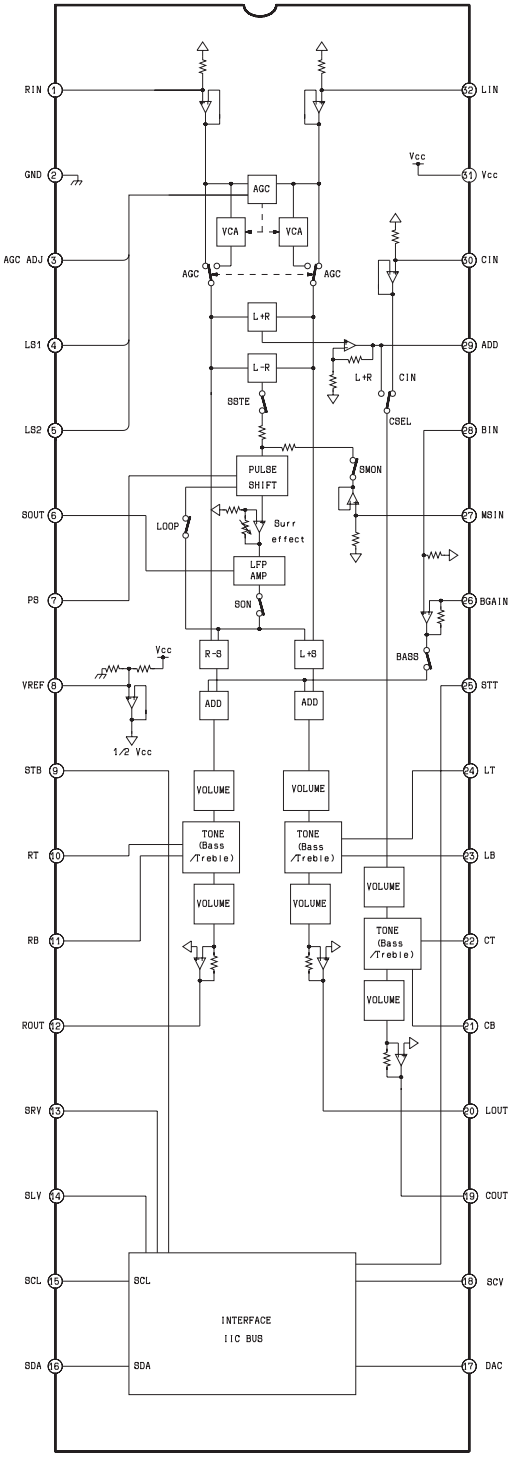
C1AA00000561
(AMPLIFIER)



C0ABFA000012
(HIGH-PERFORMANCE
PHASE-LOCKED LOOP)

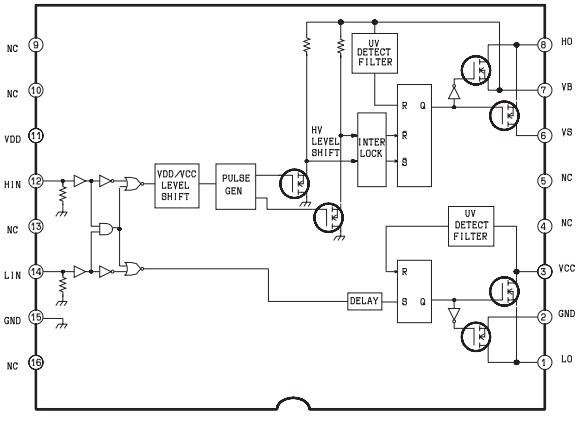


BH3866S
(AUDIO AMP)



PIN NO.	SYMBOL	FUNCTION	PIN NO.	SYMBOL	FUNCTION
1	RIN	R CH INPUT	17	DAC	EX. DAC
2	GND	GND	18	SCV	VOL C CH SHOCK
3	AGC ADJ	AGC 0dB ADJ	19	COUT	C CH OUT
4	LB1	AGC LEVEL SENSOR1	20	LOUT	L CH OUT
5	LB2	AGC LEVEL SENSOR2	21	CB	C CH BASS FC
6	SOUT	S CH OUT AND LPF	22	CT	C CH TREBLE FC
7	PS	PHASE SHIFT	23	LB	L CH BASS FC
8	VREF	1/2 VCC	24	LT	L CH TREBLE
9	STB	BASS SHOCK	25	STT	TREBLE SHOCK
10	RT	R CH TREBLE FC	26	BGAIN	BASS MIX GAIN
11	RB	R CH BASS FC	27	MBIN	MONO SURR IN
12	ROUT	R CH OUT	28	BIN	BASS DET LPF AMP
13	SRV	VOL R CH SHOCK	29	ADD	AGC L+R OUT
14	SLV	VOL L CH SHOCK	30	CIN	C CH INPUT
15	SCL	SERIAL CLOCK	31	VCC	9V
16	SDA	SERIAL DATA	32	LIN	L CH INPUT

C0ZBZ0000138
(HALF BRIGE DRIVER)

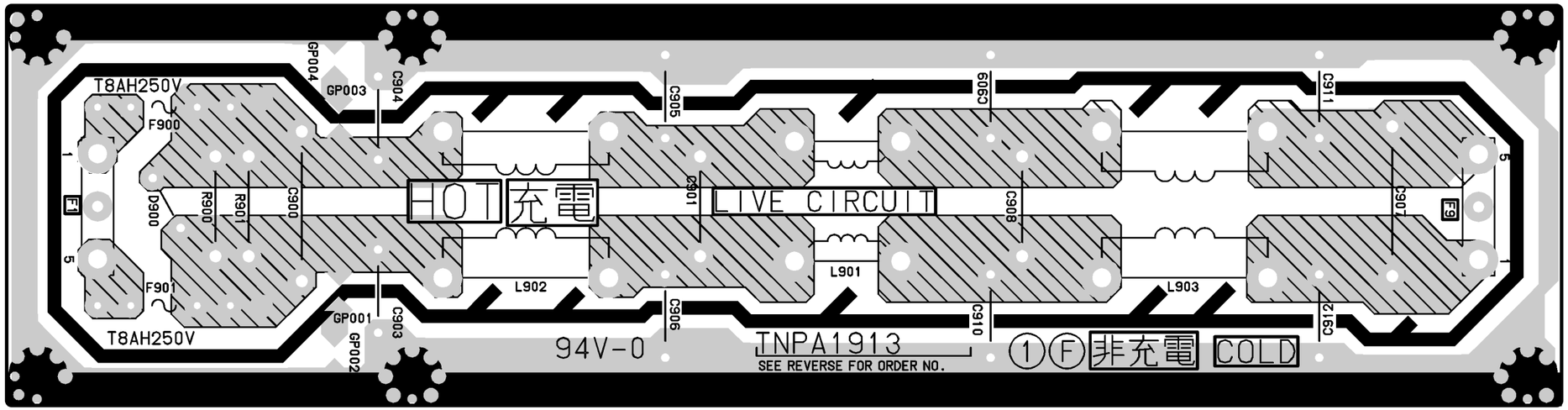


HIN	LIN	VBS UV	VCC UV	HO	LO	REMARK
0	0	0	0	0	0	NORMAL OFF
0	1	0	0	0	1	LO ON
1	0	0	0	1	0	HO ON
1	1	0	0	0	0	LIN, HIN:H LO, HO OFF
X	0	1	0	0	0	VBS UV CUT LO OFF
X	1	1	0	0	1	VBS UV CUT LO ON
0	X	0	1	0	0	VCC UV CUT HO OFF
1	X	0	1	1	0	VCC UV CUT HO ON

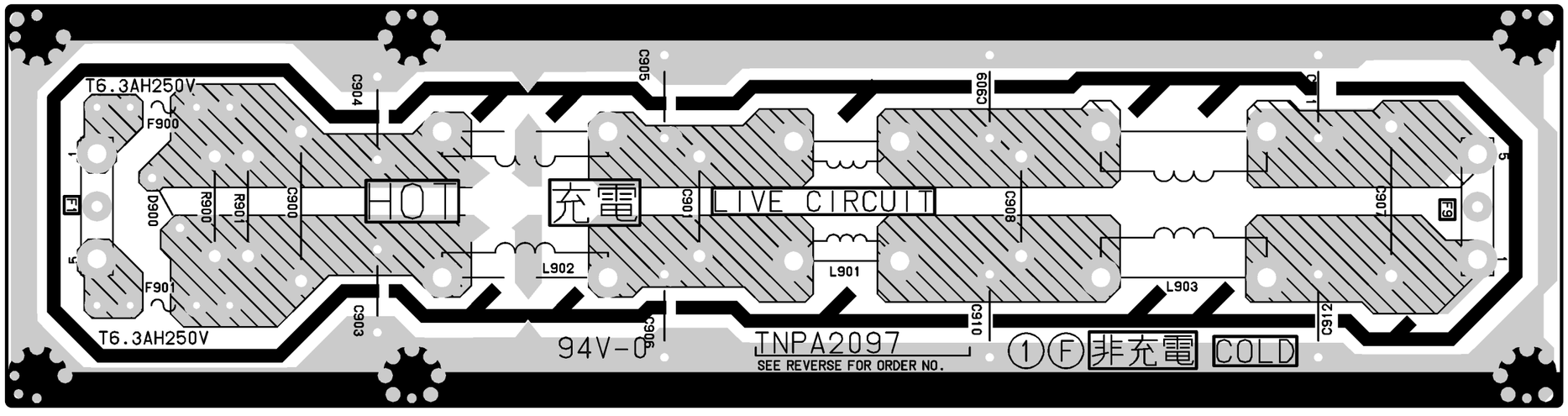
12 Conductor Views

12.1. F-Board

F-BOARD (FOIL SIDE)
TXN/F10L32 (50HP81)

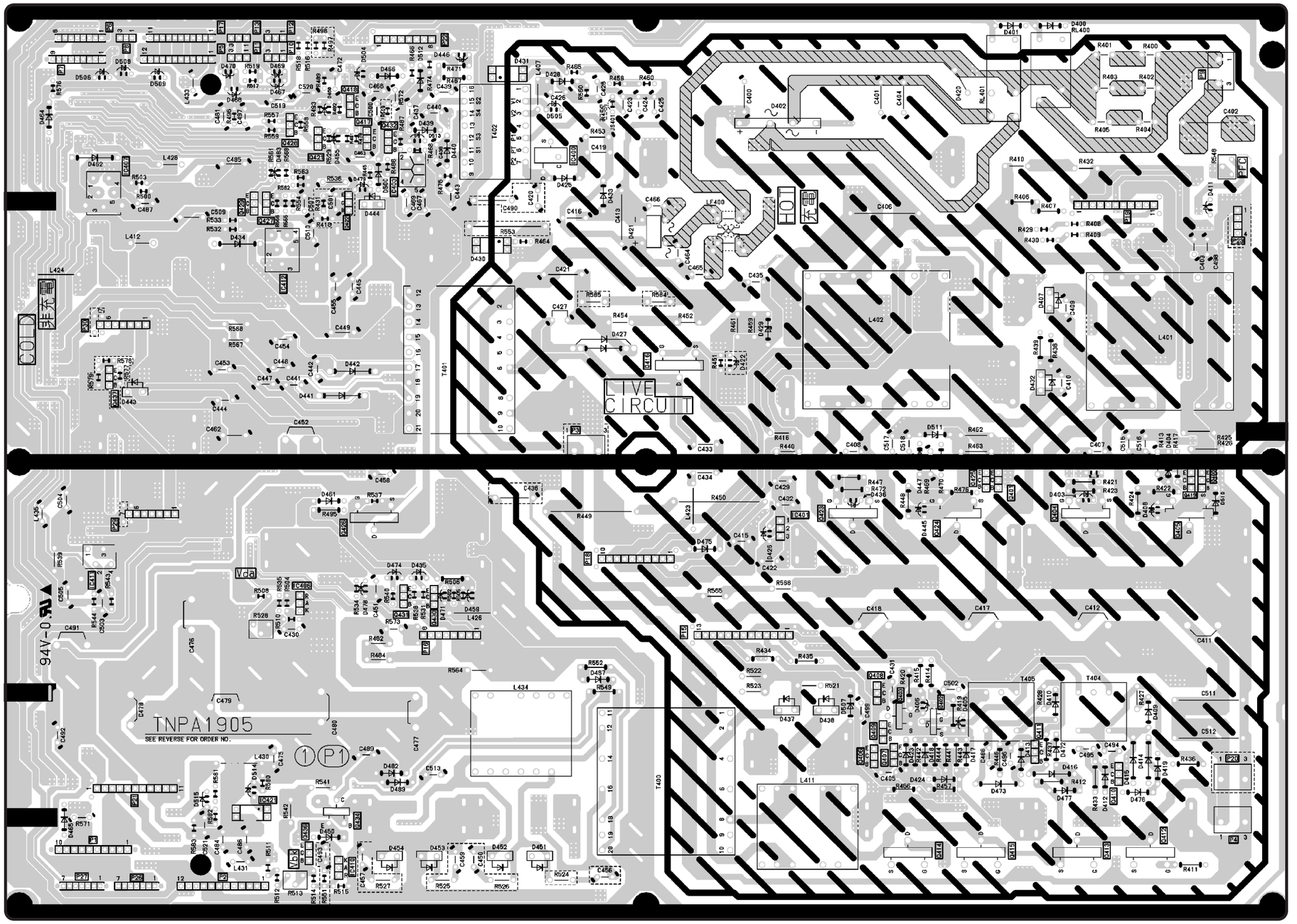


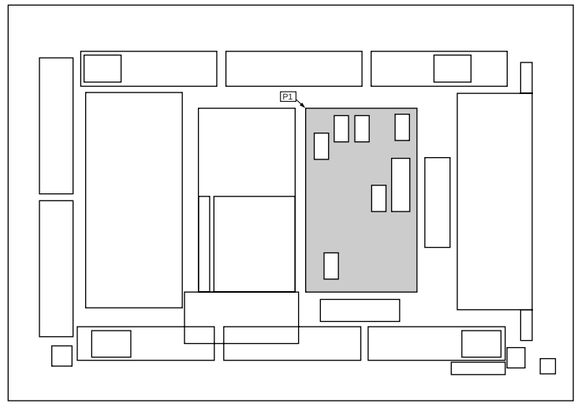
F-BOARD (FOIL SIDE)
TXN/F10HAS (50WP16 SERIES)



12.2. P1-Board

P1-BOARD (FOIL SIDE)
TXNP110L32





PARTS LOCATION

P1-BOARD (FOIL SIDE)

IC	
IC406	C-3
IC407	B-5
IC410	C-1
IC411	B-3
IC412	C-4
IC421	C-1

TARNSISTOR	
Q401	G-3
Q402	G-2
Q403	G-2
Q404	G-3
Q405	H-3
Q406	F-2
Q407	F-2
Q408	F-2
Q409	F-2
Q410	H-1
Q411	G-2
Q412	H-1
Q413	H-1
Q414	G-1
Q415	G-1
Q416	E-4
Q417	C-5
Q418	C-6
Q419	H-3
Q422	C-5
Q423	F-3
Q424	G-3
Q425	G-3
Q426	C-3
Q427	C-5
Q428	C-5
Q429	C-5
Q430	D-2
Q431	D-2
Q432	C-5
Q434	C-1
Q436	C-1
Q437	B-4

ADDRESS INFORMATION

PARTS LOCATION

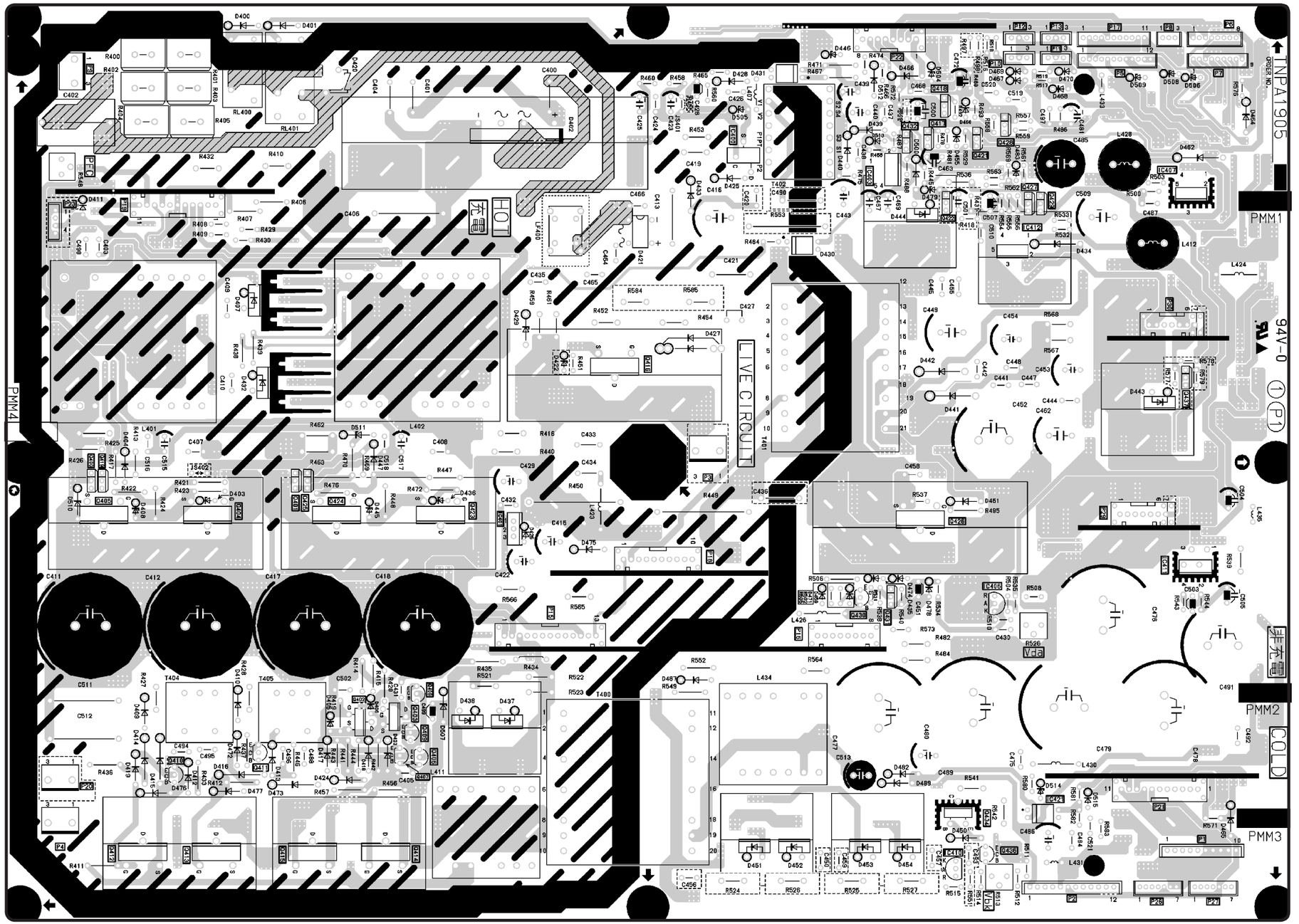
P1-BOARD (COMPONENT SIDE)

IC	
IC406	G-3
IC407	H-5
IC410	G-1
IC411	H-3
IC412	G-5
IC421	G-1

TRANSISTOR	
Q400	B-3
Q401	C-3
Q402	C-2
Q403	D-2
Q404	C-3
Q405	B-3
Q406	D-2
Q407	D-2
Q408	D-2
Q409	D-2
Q410	B-2
Q411	C-2
Q412	B-1
Q413	B-1
Q414	D-1
Q415	C-1
Q416	D-4
Q417	G-5
Q418	B-3
Q418	G-6
Q421	G-5
Q422	G-5
Q423	D-3
Q424	C-3
Q425	C-3
Q426	G-3
Q427	G-5
Q428	G-5
Q429	G-5
Q430	F-3
Q431	F-3
Q432	G-5
Q434	G-1
Q436	G-1
Q437	H-4

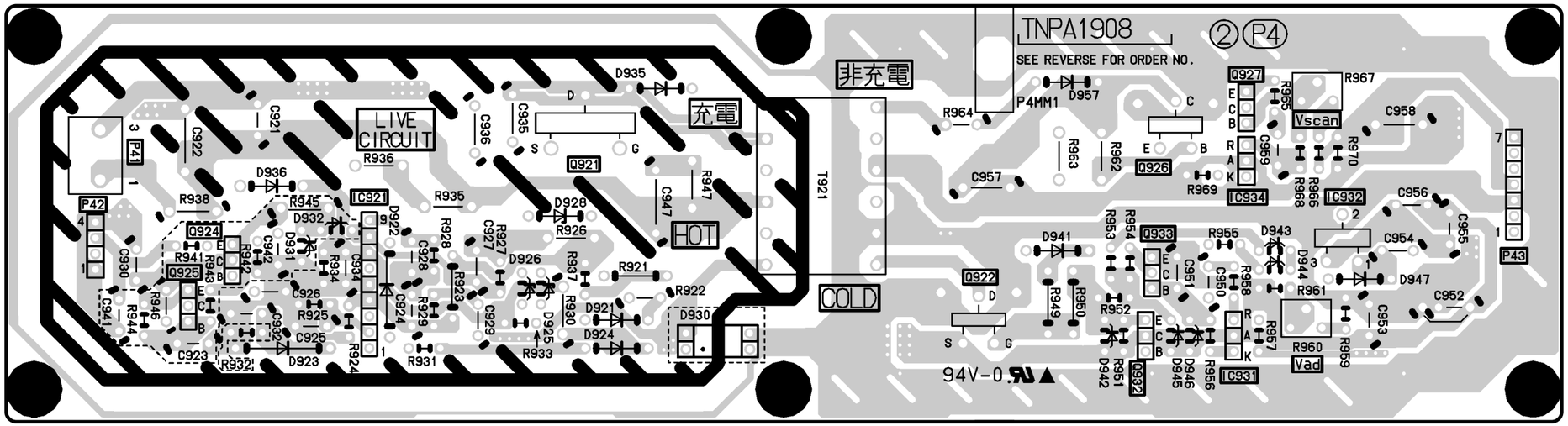
ADDRESS INFORMATION

P1-BOARD (COMPONENT SIDE)
TXNP110L32

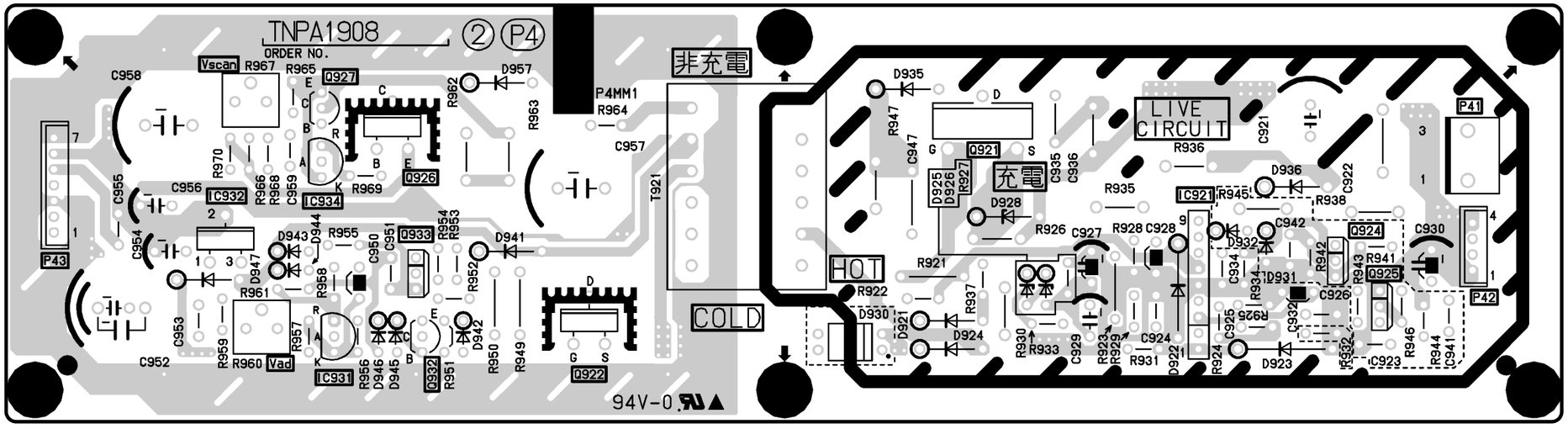


12.3. P4-Board

P4-BOARD (FOIL SIDE)
TNPA1908



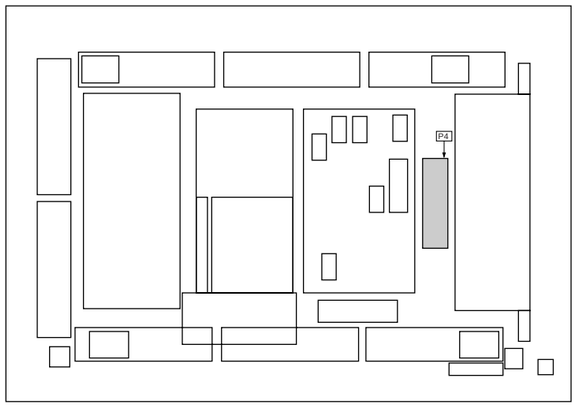
P4-BOARD (COMPONENT SIDE)
TNPA1908



PARTS LOCATION

P4-BOARD (FOIL SIDE)	
IC	
IC921	C-4
IC931	G-4
IC932	H-5
IC934	G-5
TRNSISTOR	
Q921	D-5
Q922	F-4
Q924	B-5
Q925	B-4
Q926	G-5
Q927	G-5
Q932	G-4
Q933	G-5

ADDRESS INFORMATION



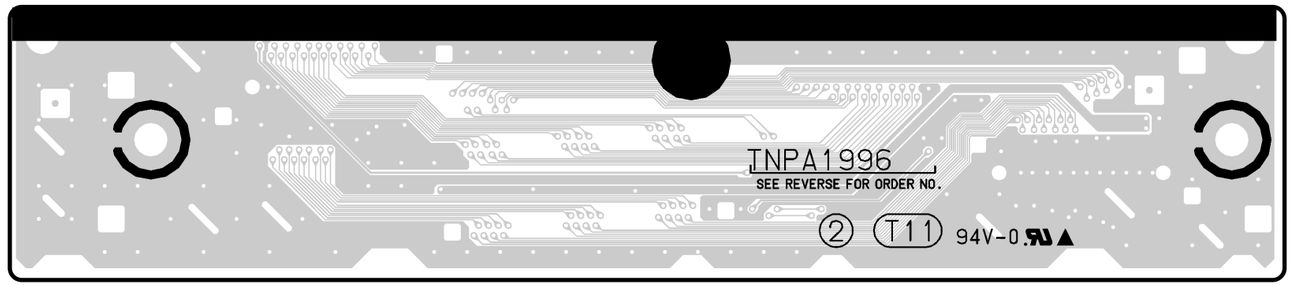
PARTS LOCATION

P4-BOARD (COMPONENT SIDE)	
IC	
IC921	G-2
IC931	C-1
IC932	B-2
IC934	C-2
TRANSISTOR	
Q921	F-2
Q922	D-1
Q924	H-2
Q925	H-2
Q926	C-2
Q927	C-3
Q932	C-1
Q933	C-2

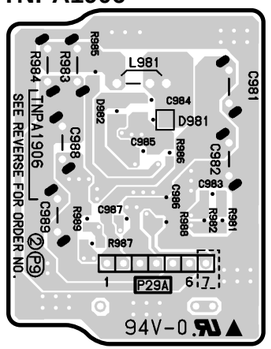
ADDRESS INFORMATION

12.4. P3, P5, P6, P7, P8, P9 and T11-Board

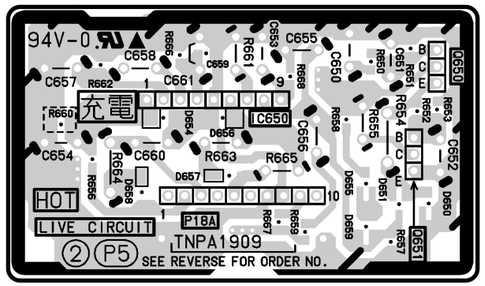
T11-BOARD (FOIL SIDE)
TNPA1996



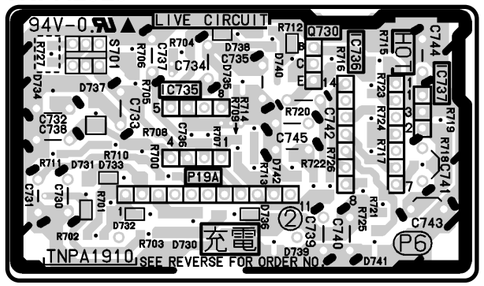
P9-BOARD (FOIL SIDE)
TNPA1906



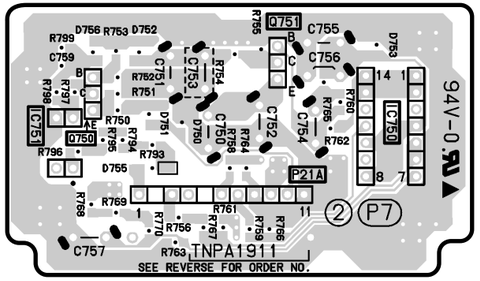
P5-BOARD (FOIL SIDE)
TNPA1909



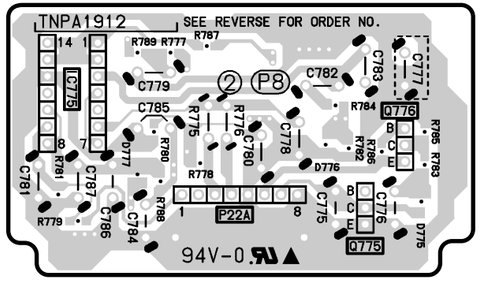
P6-BOARD (FOIL SIDE)
TNPA1910



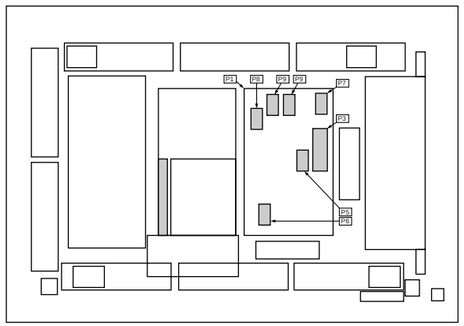
P7-BOARD (FOIL SIDE)
TNPA1911

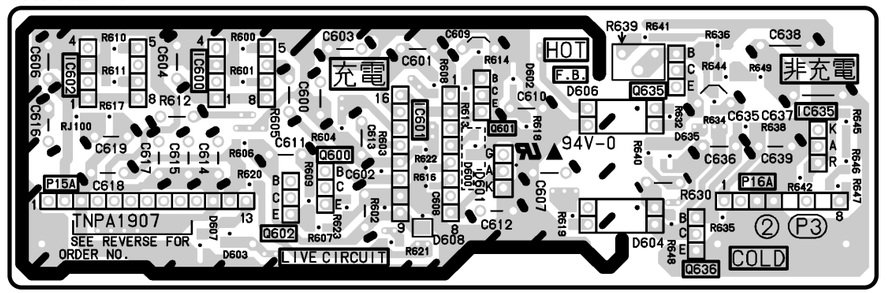


P8-BOARD (FOIL SIDE)
TNPA1912

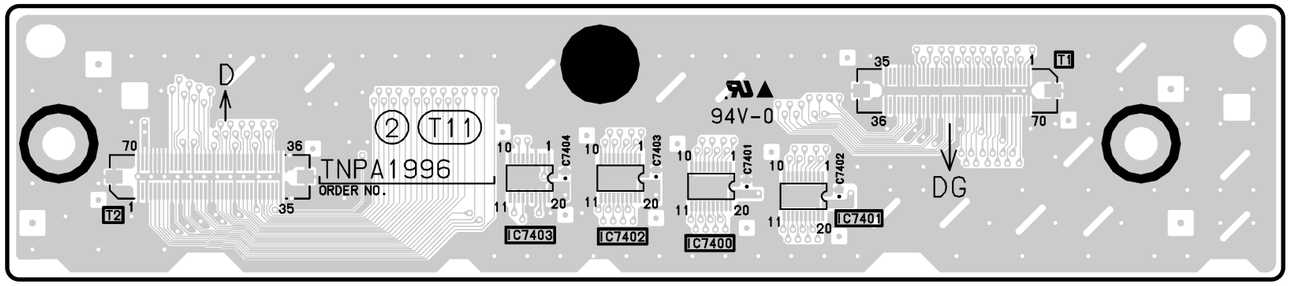


P3-BOARD (FOIL SIDE)
TNPA1907

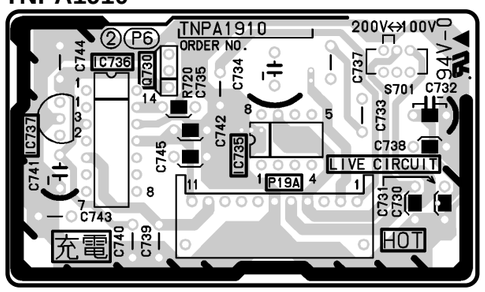




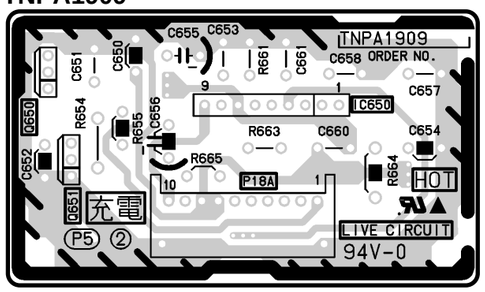
T11-BOARD (COMPONENT SIDE)
TNPA1996



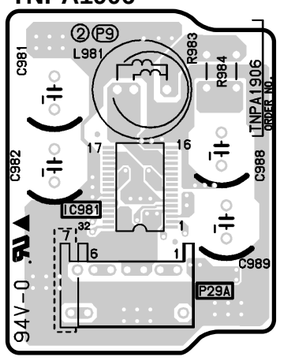
P6-BOARD (COMPONENT SIDE)
TNPA1910



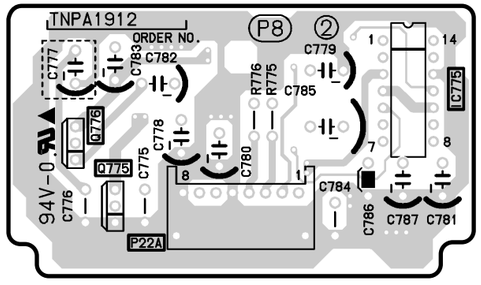
P5-BOARD (COMPONENT SIDE)
TNPA1909



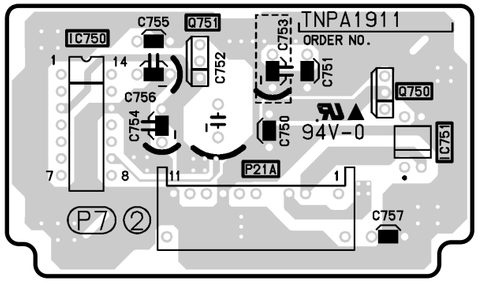
P9-BOARD (COMPONENT SIDE)
TNPA1906



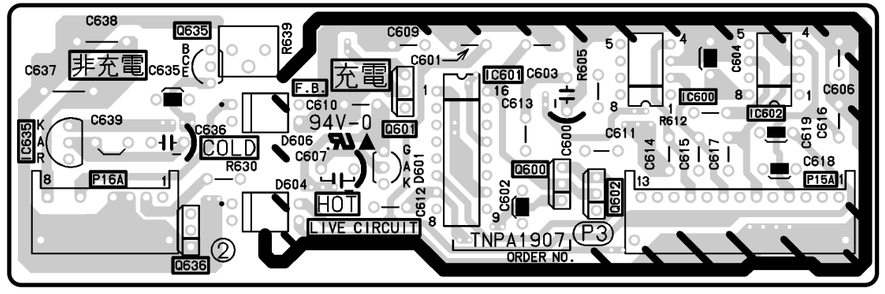
P8-BOARD (COMPONENT SIDE)
TNPA1912

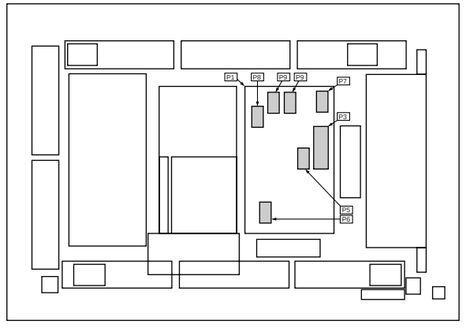


P7-BOARD (COMPONENT SIDE)
TNPA1911



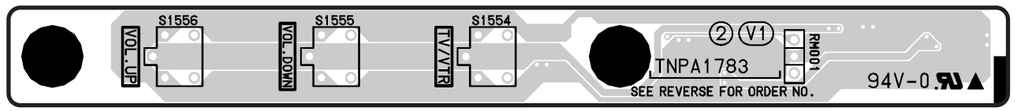
P3-BOARD (COMPONENT SIDE)
TNPA1907





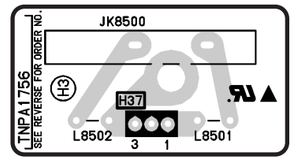
12.5. H, H3, S1 and V1-Board

V1-BOARD (FOIL SIDE)
TNPA1783

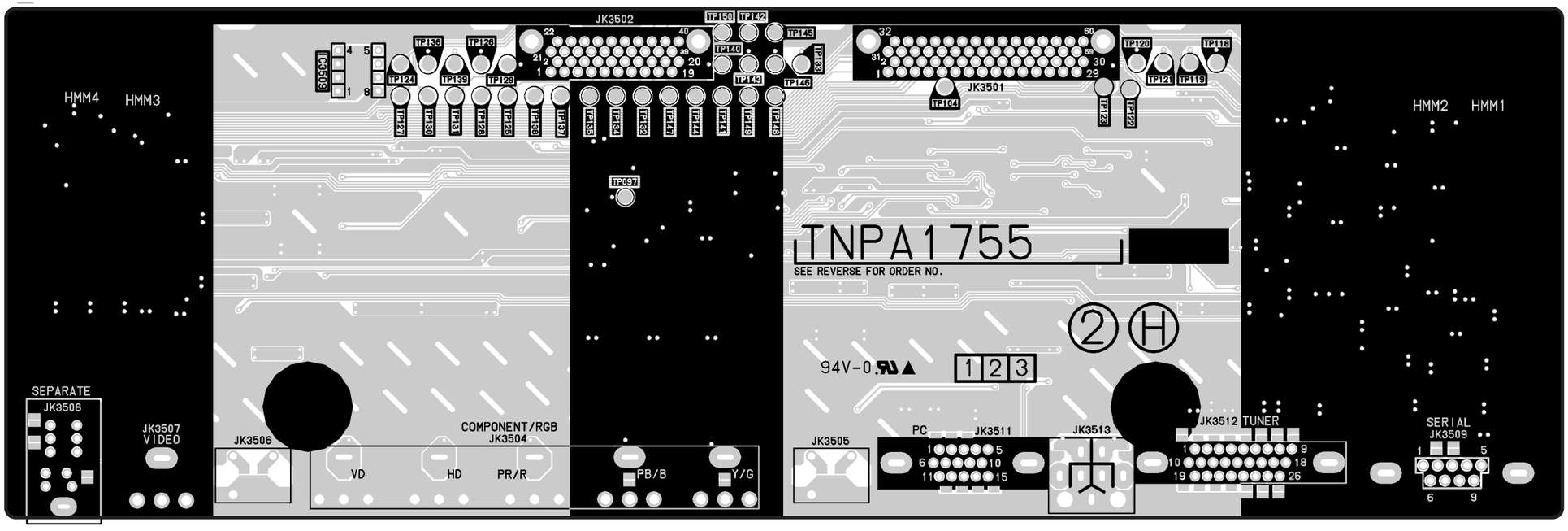


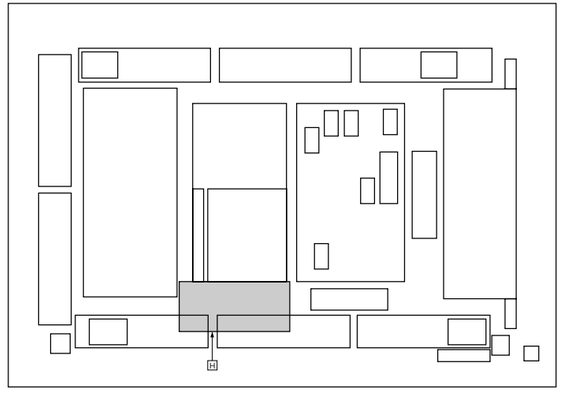
S1-BOARD
TNPA1784

H3-BOARD
TNPA1756AB



H-BOARD (FOIL SIDE)
TNPA1755





PARTS LOCATION

H-BOARD (FOIL SIDE)	
IC	
IC3509	C-4
TEST POINT	
TP097	D-3
TP104	F-3
TP118	G-4
TP119	G-4
TP120	G-4
TP121	G-4
TP122	G-3
TP123	G-3
TP124	C-4
TP125	D-3
TP126	C-4
TP127	C-3
TP128	C-3
TP129	C-4
TP130	C-3
TP131	C-3
TP132	D-3
TP133	E-4
TP134	D-3
TP135	D-3
TP136	C-4
TP137	D-3
TP138	D-3
TP139	C-4
TP140	E-4
TP141	E-3
TP142	E-4
TP143	E-4
TP144	D-3
TP145	E-4
TP146	E-4
TP147	D-3
TP148	E-3
TP149	E-3
TP150	E-4

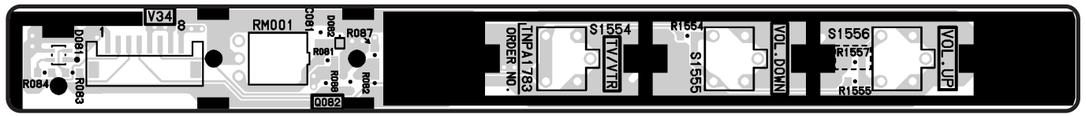
ADDRESS INFORMATION

PARTS LOCATION

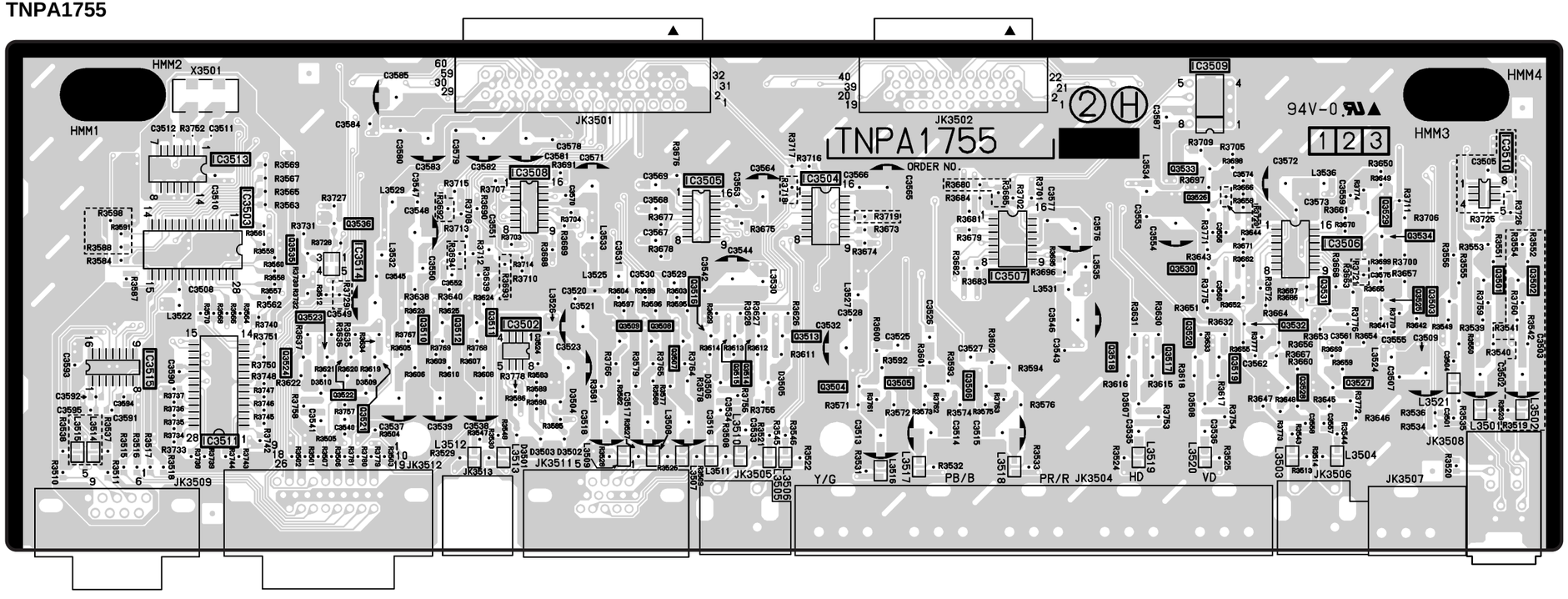
H-BOARD (COMPONENT SIDE)	
IC	
IC3502	D-2
IC3503	B-3
IC3504	E-3
IC3505	E-3
IC3506	H-3
IC3507	F-3
IC3508	D-3
IC3509	G-4
IC3510	I-3
IC3511	B-2
IC3513	B-3
IC3514	C-3
IC3515	B-2
TRNSISTOR	
Q3501	I-3
Q3502	I-3
Q3503	H-3
Q3504	E-2
Q3505	F-2
Q3506	F-2
Q3507	D-2
Q3508	D-2
Q3509	D-2
Q3510	C-2
Q3511	C-2
Q3512	C-2
Q3513	E-2
Q3514	E-2
Q3515	E-2
Q3517	G-2
Q3518	G-2
Q3519	G-2
Q3520	G-2
Q3521	C-2
Q3522	C-2
Q3523	C-2
Q3524	B-2
Q3525	H-3
Q3526	G-3
Q3527	H-2
Q3528	H-2
Q3529	H-3
Q3530	G-3
Q3531	H-3
Q3532	H-2
Q3533	G-3
Q3534	H-3
Q3535	B-3
Q3536	C-3

ADDRESS INFORMATION

V1-BOARD (COMPONENT SIDE)
TNPA1783

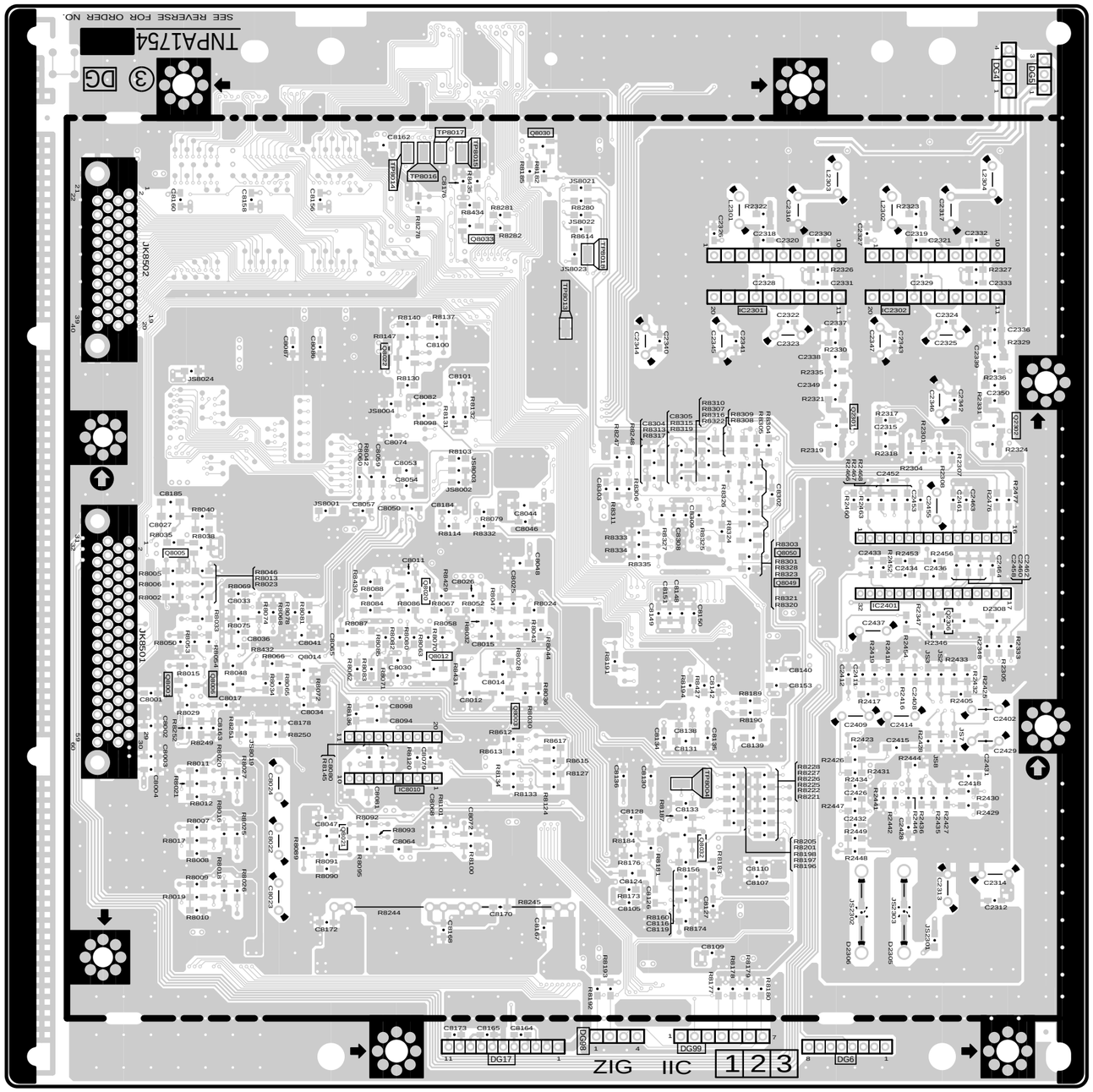


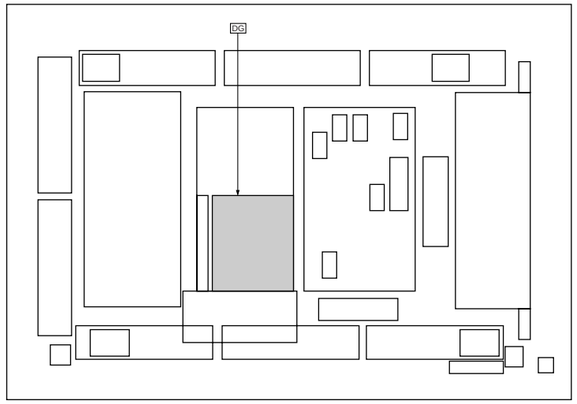
H-BOARD (COMPONENT SIDE)
TNPA1755


HMM1
HMM2
HMM3
HMM4
X3501
JK3501
JK3502
TNPA1755
ORDER NO.
IC3509
94V-0
JK3509
JK3511
JK3512
JK3513
JK3505
JK3504
JK3506
JK3507
JK3508
Y/G
PB/B
PR/R
HD
VD
IC3513
IC3508
IC3505
IC3504
IC3507
IC3514
IC3502
IC3515
IC3511
IC3503
Q3536
Q3533
Q3534
Q3506
Q3507
Q3502
Q3513
Q3504
Q3505
Q3519
Q3517
Q3520
Q3532
Q3527
Q3528
Q3529
Q3530
Q3523
Q3524
Q3522
Q3521
Q3512
Q3510
Q3511
Q3514
Q3515
Q3516
Q3518
Q3501
Q3503
Q3508
Q3509
Q3510
Q3511
Q3512
Q3513
Q3514
Q3515
Q3516
Q3517
Q3518
Q3519
Q3520
Q3521
Q3522
Q3523
Q3524
Q3527
Q3528
Q3529
Q3530
Q3532
Q3533
Q3534
Q3536
D3501
D3502
D3503
D3504
D3505
D3506
D3507
D3508
D3509
D3510
D3511
D3512
D3513
D3514
D3515
D3516
D3517
D3518
D3519
D3520
D3521
D3522
D3523
D3524
D3525
D3526
D3527
D3528
D3529
D3530
D3531
D3532
D3533
D3534
D3535
D3536
D3537
D3538
D3539
D3540
D3541
D3542
D3543
D3544
D3545
D3546
D3547
D3548
D3549
D3550
D3551
D3552
D3553
D3554
D3555
D3556
D3557
D3558
D3559
D3560
D3561
D3562
D3563
D3564
D3565
D3566
D3567
D3568
D3569
D3570
D3571
D3572
D3573
D3574
D3575
D3576
D3577
D3578
D3579
D3580
D3581
D3582
D3583
D3584
D3585
D3586
D3587
D3588
D3589
D3590
D3591
D3592
D3593
D3594
D3595
D3596
D3597
D3598
D3599
D3600
D3601
D3602
D3603
D3604
D3605
D3606
D3607
D3608
D3609
D3610
D3611
D3612
D3613
D3614
D3615
D3616
D3617
D3618
D3619
D3620
D3621
D3622
D3623
D3624
D3625
D3626
D3627
D3628
L3501
L3502
L3503
L3504
L3505
L3506
L3507
L3508
L3509
L3510
L3511
L3512
L3513
L3514
L3515
L3516
L3517
L3518
L3519
L3520
L3521
L3522
L3523
L3524
L3525
L3526
L3527
L3528
L3529
L3530
L3531
L3532
L3533
L3534
L3535
L3536
L3537
L3538
L3539
L3540
L3541
L3542
L3543
L3544
L3545
L3546
L3547
L3548
L3549
L3550
L3551
L3552
L3553
L3554
L3555
L3556
L3557
L3558
L3559
L3560
L3561
L3562
L3563
L3564
L3565
L3566
L3567
L3568
L3569
L3570
L3571
L3572
L3573
L3574
L3575
L3576
L3577
L3578
L3579
L3580
L3581
L3582
L3583
L3584
L3585
L3586
L3587
L3588
L3589
L3590
L3591
L3592
L3593
L3594
L3595
L3596
L3597
L3598
L3599
L3600
L3601
L3602
L3603
L3604
L3605
L3606
L3607
L3608
L3609
L3610
L3611
L3612
L3613
L3614
L3615
L3616
L3617
L3618
L3619
L3620
L3621
L3622
L3623
L3624
L3625
L3626
L3627
L3628
R3501
R3502
R3503
R3504
R3505
R3506
R3507
R3508
R3509
R3510
R3511
R3512
R3513
R3514
R3515
R3516
R3517
R3518
R3519
R3520
R3521
R3522
R3523
R3524
R3525
R3526
R3527
R3528
R3529
R3530
R3531
R3532
R3533
R3534
R3535
R3536
R3537
R3538
R3539
R3540

12.6. DG-Board

DG-BOARD (FOIL SIDE)
TXNDG10L33



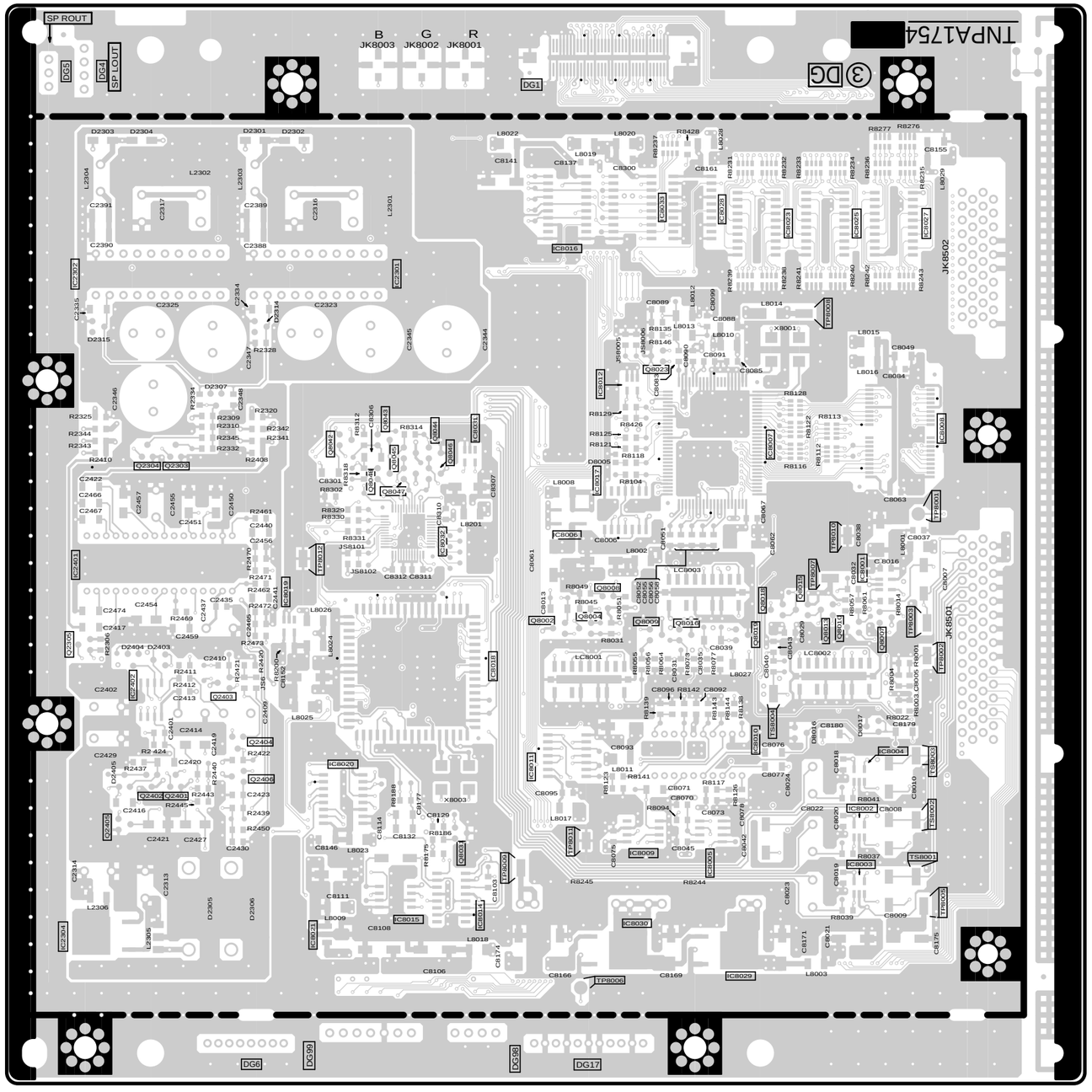


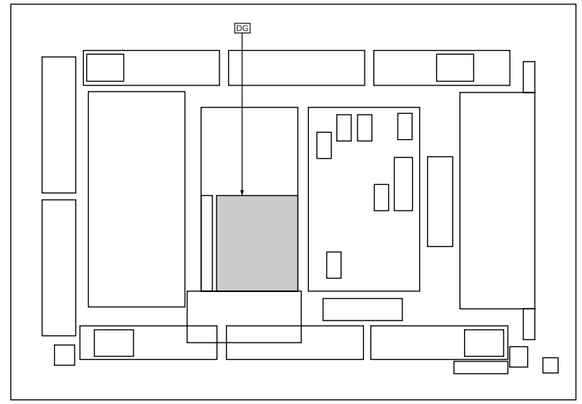
PARTS LOCATION

DG-BOARD (FOIL SIDE)			
IC		Q8050	E-3
IC2301	D-5	**TEST PONIT**	
IC2302	E-5	TP8004	D-2
IC2401	E-3	TP8013	D-5
IC8010	C-2	TP8014	C-5
TRANSISTOR		TP8015	C-5
Q2301	E-4	TP8016	C-5
Q2306	E-3	TP8018	D-5
Q8001	B-3		
Q8003	C-3		
Q8005	B-3		
Q8006	B-3		
Q8012	C-3		
Q8020	C-3		
Q8022	C-4		
Q8023	C-5		
Q8026	B-2		
Q8030	C-5		
Q8032	D-2		
Q8049	E-3		

ADDRESS INFORMATION

DG-BOARD (COMPONENT SIDE)
TXNDG10L33





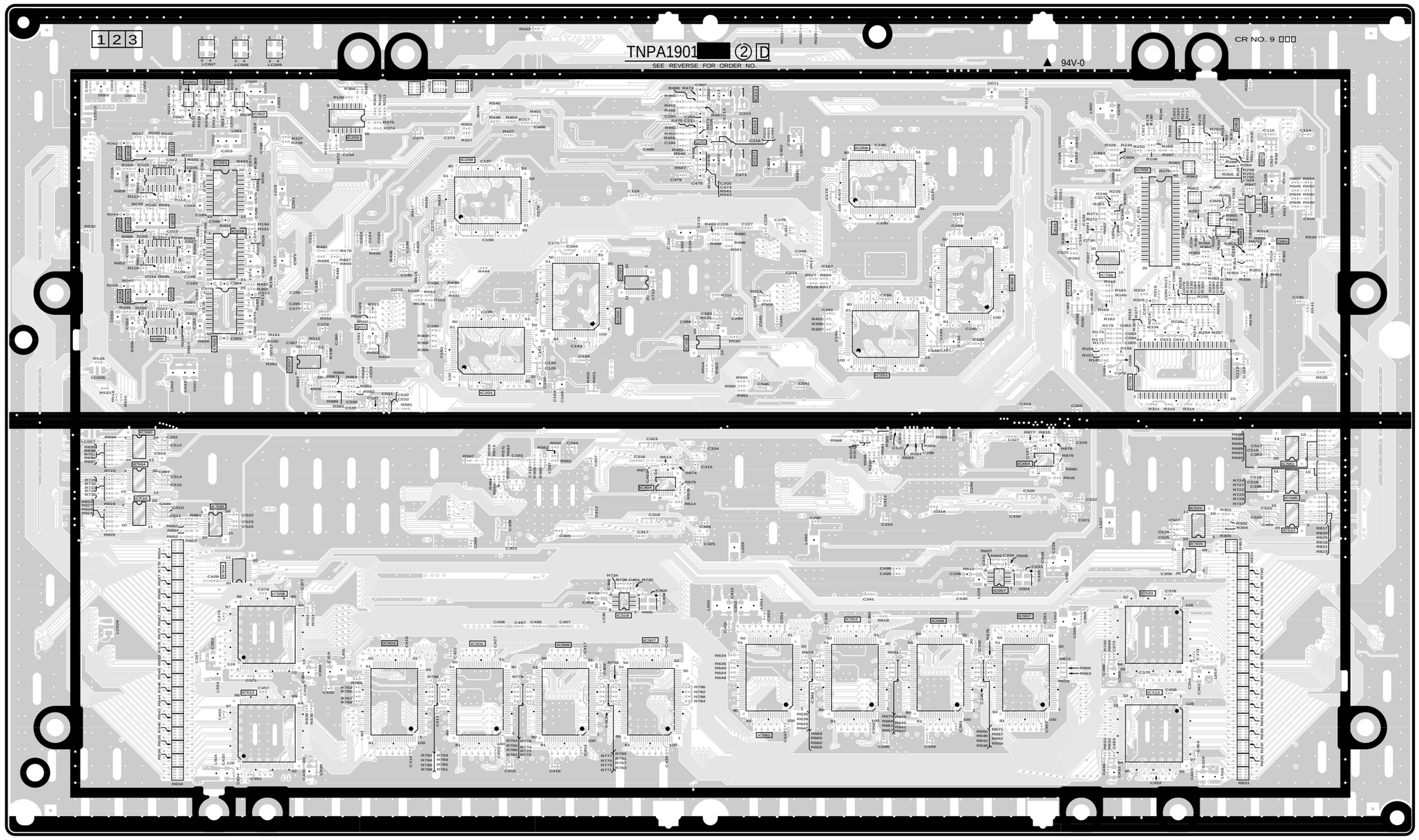
PARTS LOCATION

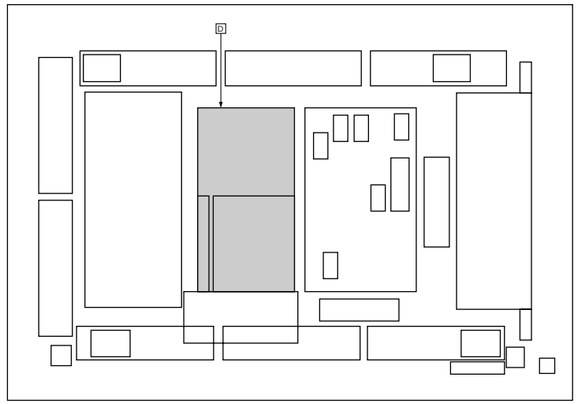
DG-BOARD (COMPONENT SIDE)					
IC		IC8030	D-2	Q8046	C-4
IC2301	C-5	IC8031	C-4	Q8047	C-4
IC2302	A-5	IC8032	C-3	Q8048	C-4
IC2304	A-1	IC8033	D-5	**TEST POINT**	
IC2401	A-3	**TRANSISTOR**		TP8001	E-4
IC2402	A-3	Q2303	B-4	TP8002	E-3
IC8001	E-3	Q2304	A-4	TP8003	E-3
IC8002	E-2	Q2305	A-3	TP8005	E-2
IC8003	E-2	Q2401	B-2	TP8006	D-1
IC8004	E-2	Q2402	A-2	TP8007	E-3
IC8005	D-2	Q2403	B-3	TP8008	E-5
IC8006	D-3	Q2404	B-2	TP8009	C-2
IC8007	E-4	Q2405	A-2	TP8010	E-3
IC8008	E-4	Q2406	B-2	TP8011	D-2
IC8009	D-2	Q8002	C-3	TP8012	B-3
IC8010	E-2	Q8004	D-3	TS8001	E-2
IC8011	C-2	Q8007	E-3	TS8002	E-2
IC8012	D-4	Q8008	D-3	TS8003	E-2
IC8014	C-2	Q8009	D-3	TS8004	E-2
IC8015	C-2	Q8010	E-3		
IC8016	D-5	Q8013	E-3		
IC8017	D-4	Q8015	E-3		
IC8018	C-3	Q8016	D-3		
IC8019	B-3	Q8018	E-3		
IC8020	B-2	Q8019	E-3		
IC8021	B-1	Q8023	D-4		
IC8023	E-5	Q8031	C-2		
IC8025	E-5	Q8042	B-4		
IC8027	E-5	Q8043	C-4		
IC8028	D-5	Q8044	C-4		
IC8029	D-1	Q8045	C-4		

ADDRESS INFORMATION

12.7. D-Board

D-BOARD (FOIL SIDE)
TZTNP010GYS





PARTS LOCATION

D-BOARD (FOIL SIDE)

IC		IC504	B-2	TRANSISTOR	
IC000	B-5	IC506	D-2	Q001	B-4
IC001	B-5	IC507	E-2	Q002	A-4
IC002	B-5	IC510	B-3	Q003	B-4
IC005	B-4	IC511	I-3	Q005	A-4
IC019	B-4	IC512	B-2	Q006	B-4
IC020	B-4	IC513	H-2	Q007	B-4
IC021	B-5	IC518	E-2	Q009	B-5
IC047	B-4	IC520	B-3	Q010	A-5
IC048	E-4	IC521	H-3	Q011	B-5
IC061	E-1	IC552	F-2	Q013	G-4
IC067	G-2	IC555	H-3	Q021	C-4
IC200	D-4	IC556	F-2	Q050	E-5
IC201	D-3	IC557	G-2	Q901	I-4
IC202	C-5	IC558	B-2	Q902	H-5
IC209	D-5	IC559	H-2	Q903	H-5
IC213	E-5	IC560	B-3		
IC214	E-5	IC561	I-3		
IC217	E-5	IC564	B-3		
IC251	F-4	IC565	I-3		
IC259	F-5	IC702	H-5		
IC260	G-4	IC703	G-4		
IC404	E-3	IC704	G-4		
IC454	G-3	IC705	H-4		
IC502	D-2	IC707	D-4		
IC503	C-2	IC907	H-5		
		IC909	H-4		

ADDRESS INFORMATION

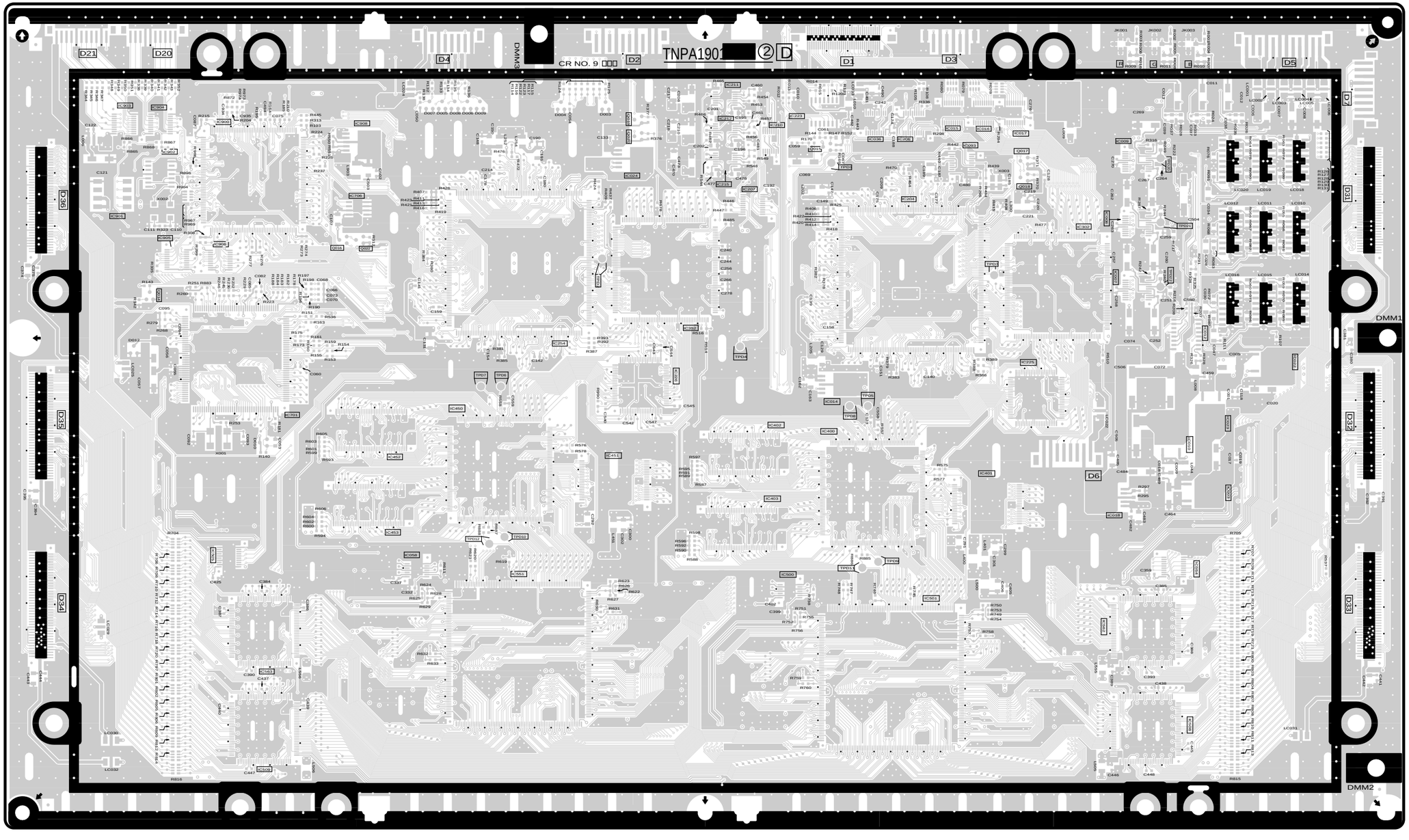
PARTS LOCATION

D-BOARD (COMPONENT SIDE)

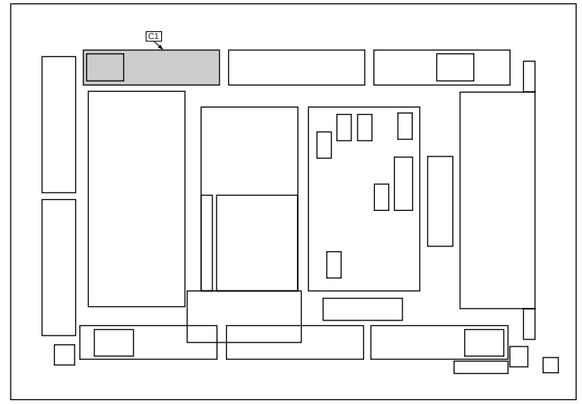
IC		IC302	G-4	TRANSISTOR	
IC003	H-3	IC352	E-4	Q014	B-4
IC007	H-4	IC400	F-3	Q015	F-5
IC008	H-4	IC401	G-3	Q016	C-4
IC009	H-5	IC402	E-3	Q017	G-5
IC010	H-3	IC403	E-3	Q018	G-5
IC012	H-4	IC450	D-3	Q019	E-5
IC014	F-3	IC451	D-3	Q020	E-5
IC015	G-5	IC452	C-3	Q022	C-4
IC016	G-5	IC453	C-3		
IC017	G-5	IC500	F-2	**TEST POINT**	
IC018	H-3	IC501	F-2		
IC023	H-3	IC505	B-2	TPD1	F-2
IC024	E-5	IC509	B-1	TPD2	D-4
IC036	F-5	IC508	H-1	TPD3	G-4
IC068	C-2	IC551	D-2	TPD4	E-4
IC093	G-5	IC554	H-2	TPD5	F-3
IC204	F-5	IC562	H-2	TPD6	D-3
IC206	F-5	IC563	B-2	TPD7	D-3
IC207	E-5	IC701	B-3	TPD7	F-5
IC210	F-5	IC706	C-5	TPD8	F-3
IC211	E-5	IC900	B-5	TPD9	F-2
IC212	E-5	IC901	A-5	TPD10	D-3
IC215	E-5	IC902	B-5	TPD12	D-3
IC223	F-5	IC903	B-5	TPD20	H-5
IC225	G-4	IC904	B-5	TPD21	H-4
IC226	E-3	IC905	B-4	TPD22	H-4
IC254	D-4	IC906	B-4		
		IC908	C-5		

ADDRESS INFORMATION

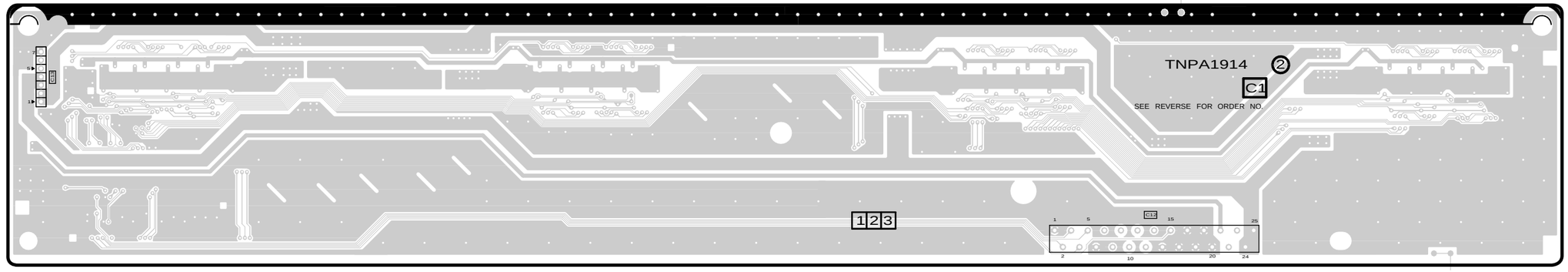
D-BOARD (COMPONENT SIDE)
TZTNP010GYS



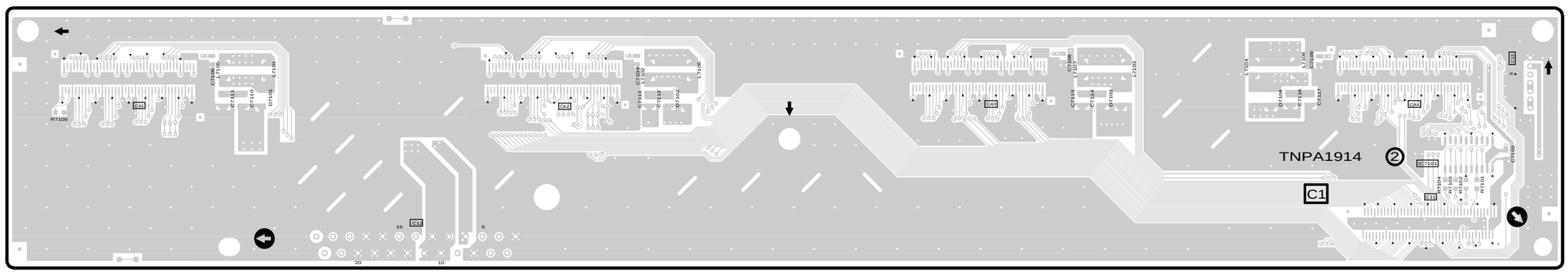
12.8. C1-Board



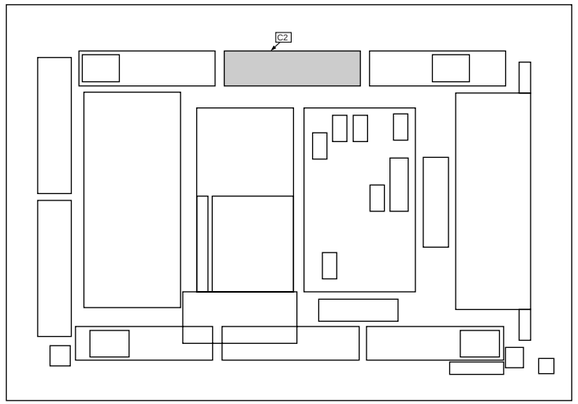
C1-BOARD (FOIL SIDE)
TNPA1914



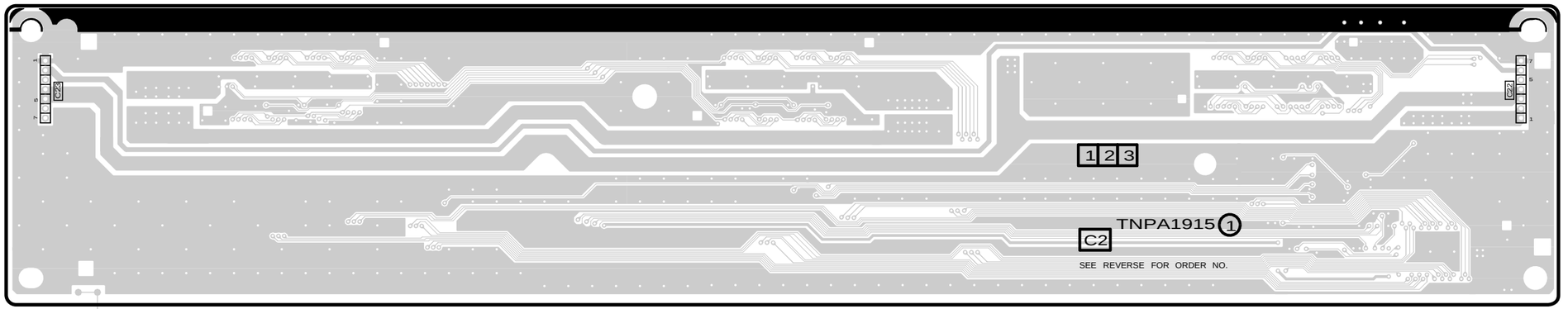
C1-BOARD (COMPONENT SIDE)
TNPA1914



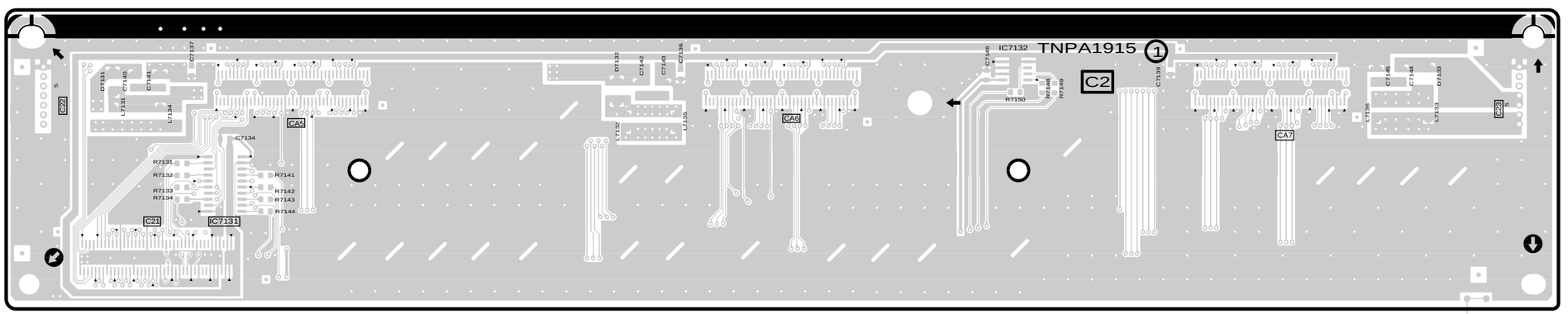
12.9. C2-Board



C2-BOARD (FOIL SIDE)
TNPA1915

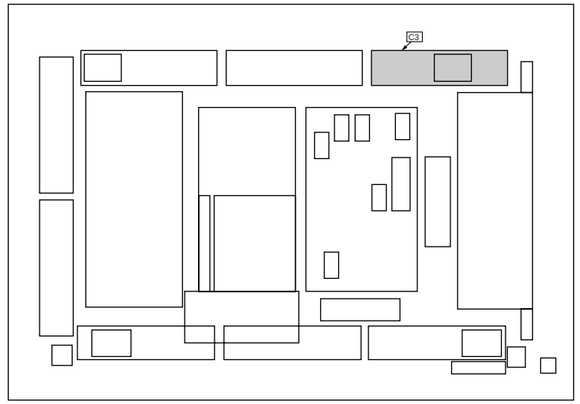


C2-BOARD (COMPONENT SIDE)
TNPA1915

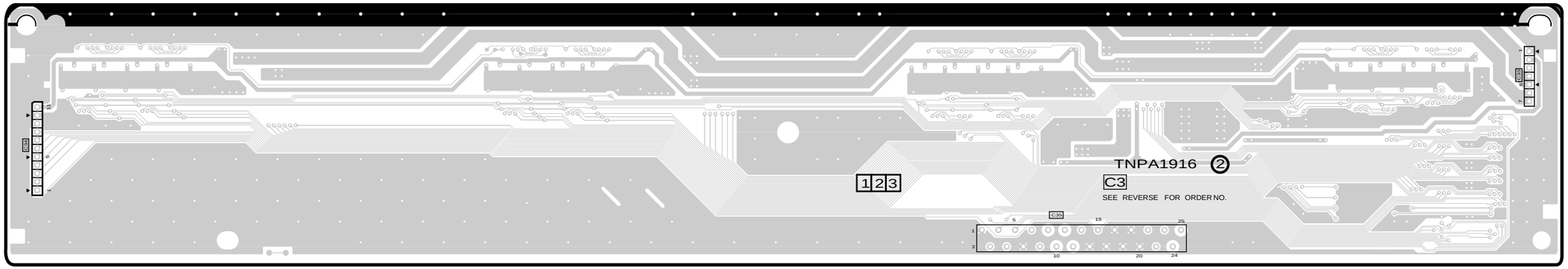


A B C D E F G H I

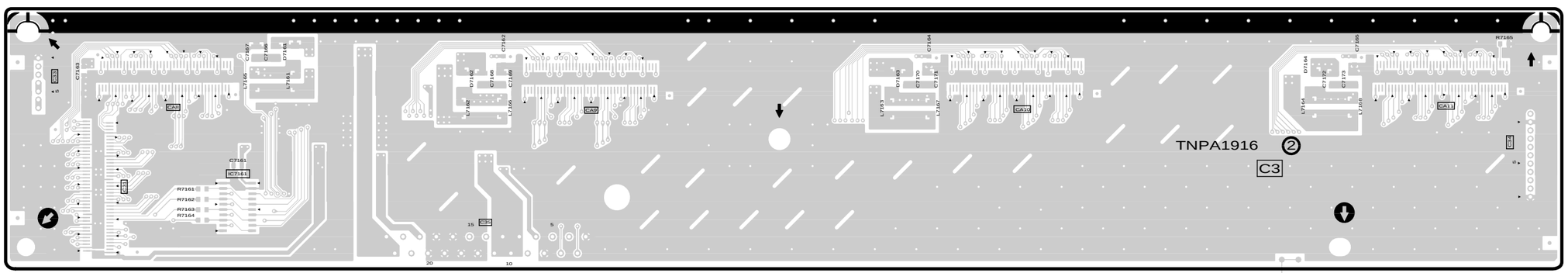
12.10. C3-Board



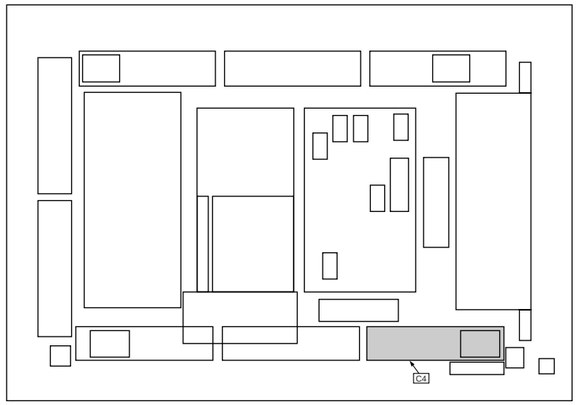
C3-BOARD (FOIL SIDE)
TNPA1916



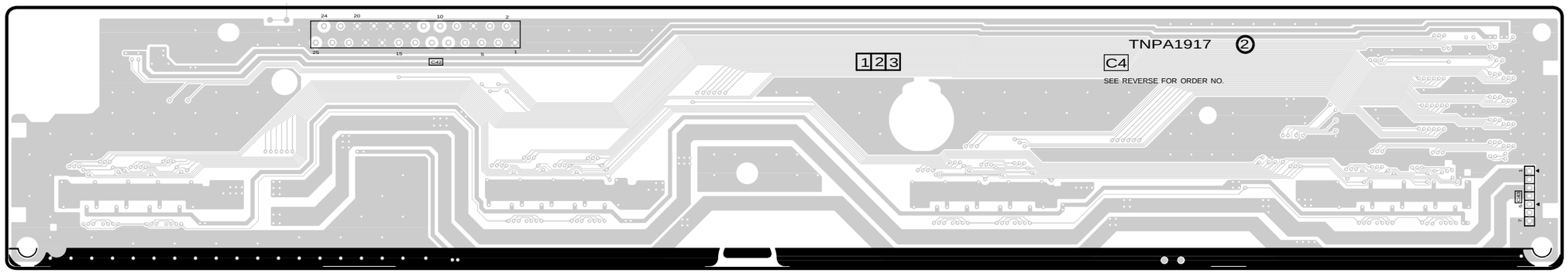
C3-BOARD (COMPONENT SIDE)
TNPA1916



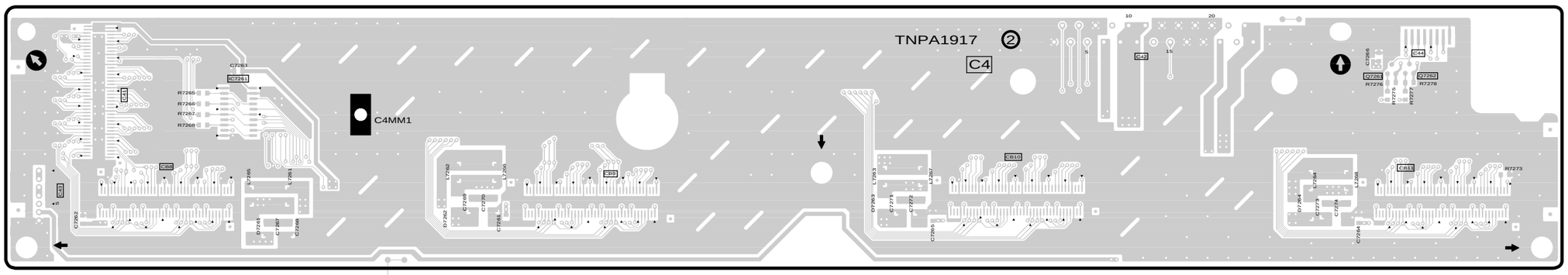
12.11. C4-Board



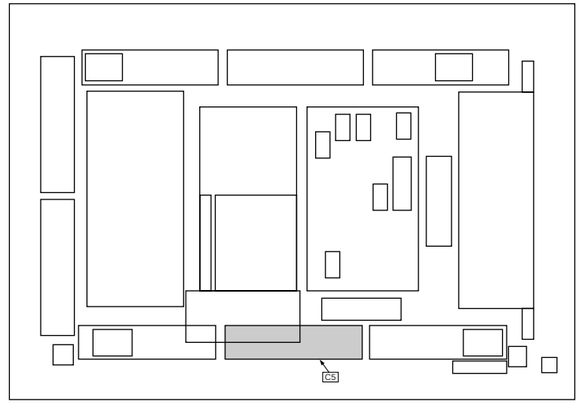
C4-BOARD (FOIL SIDE)
TNPA1917



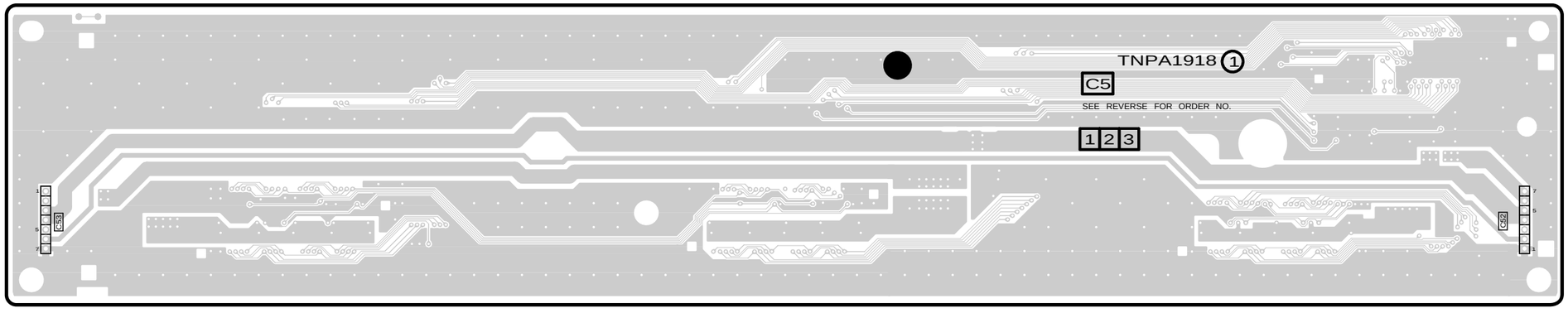
C4-BOARD (COMPONENT SIDE)
TNPA1917



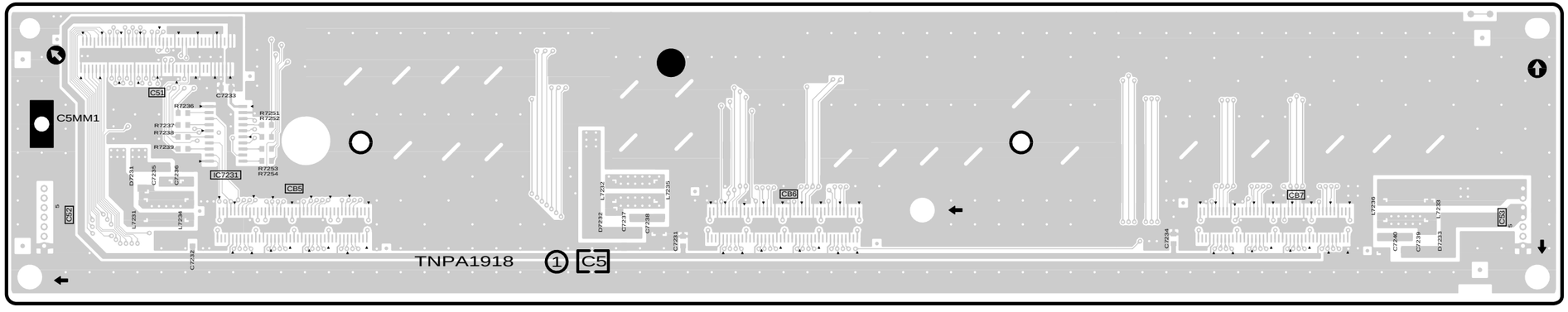
12.12. C5-Board



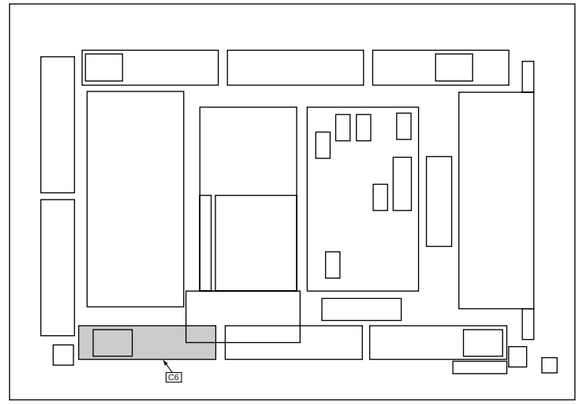
C5-BOARD (FOIL SIDE)
TNPA1918



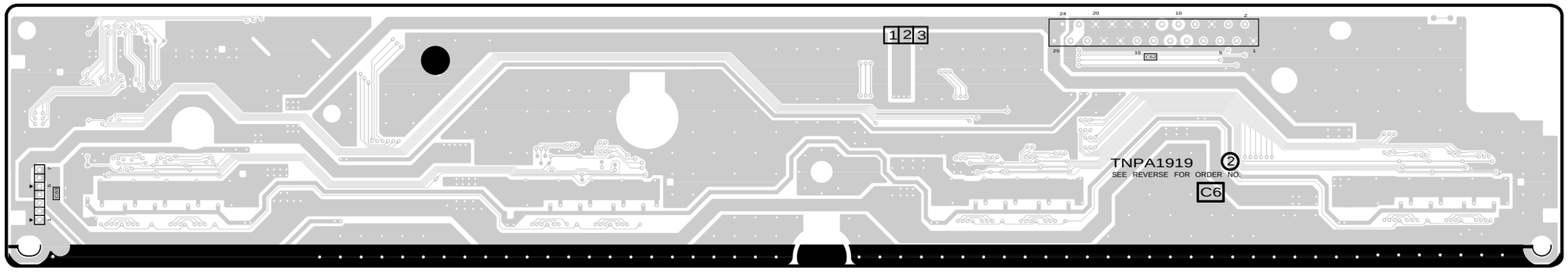
C5-BOARD (COMPONENT SIDE)
TNPA1918



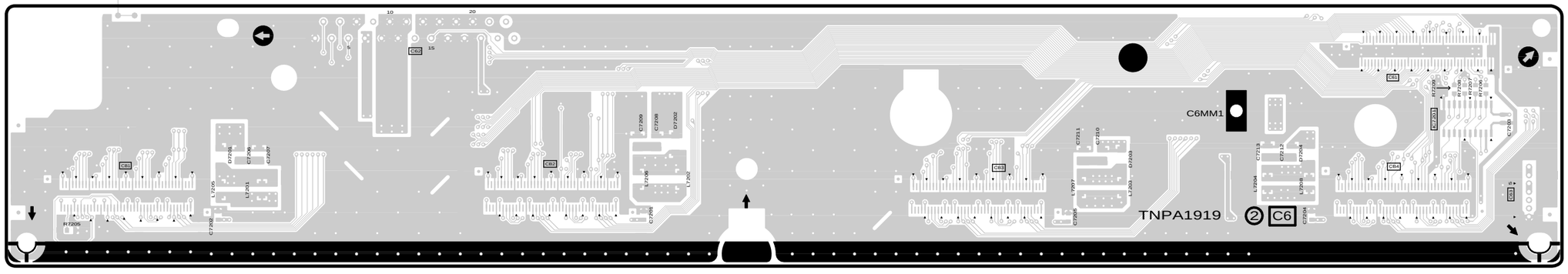
12.13. C6-Board



C6-BOARD (FOIL SIDE)
TNPA1919

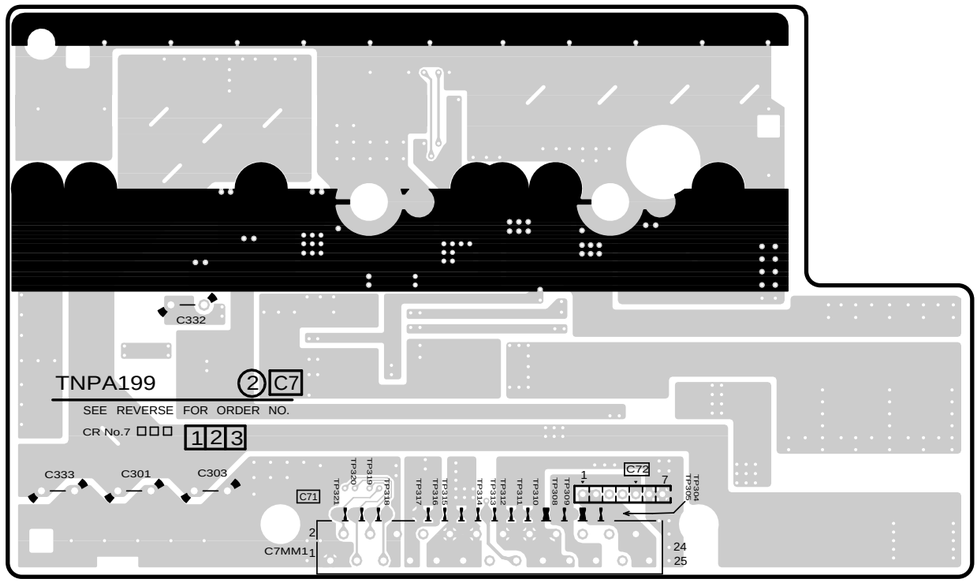


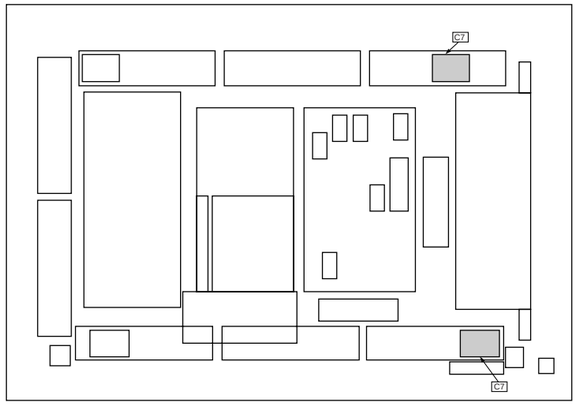
C6-BOARD (COMPONENT SIDE)
TNPA1919



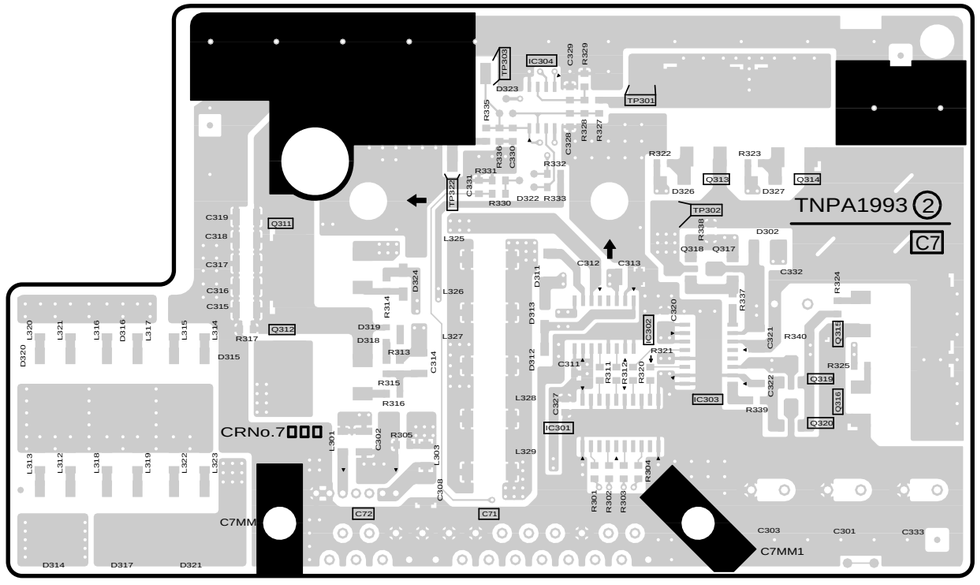
12.14. C7-Board

C7-BOARD (FOIL SIDE)
TNPA1993



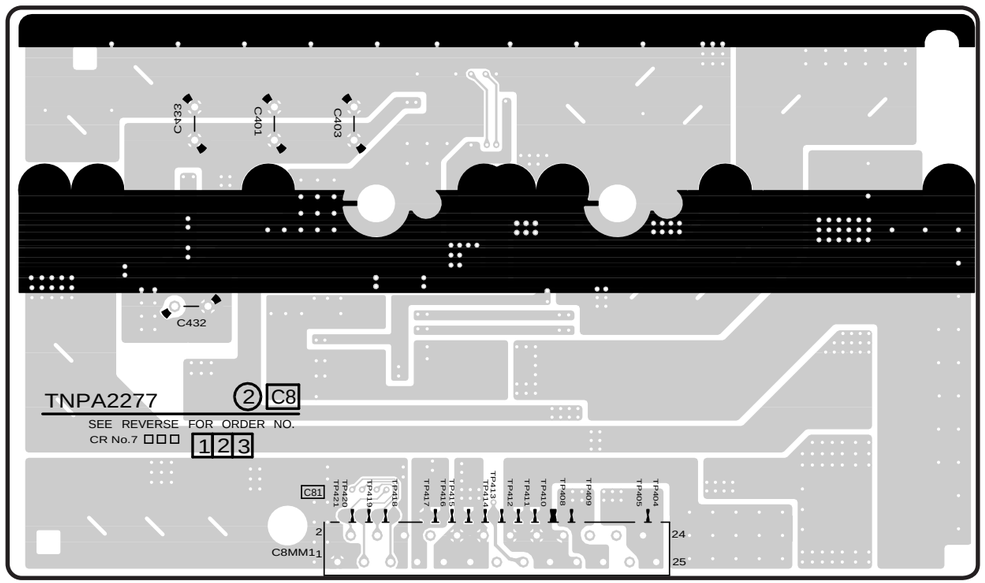


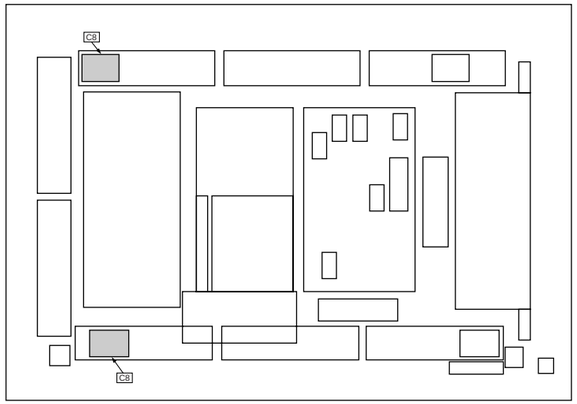
C7-BOARD (COMPONENT SIDE)
TNPA1993



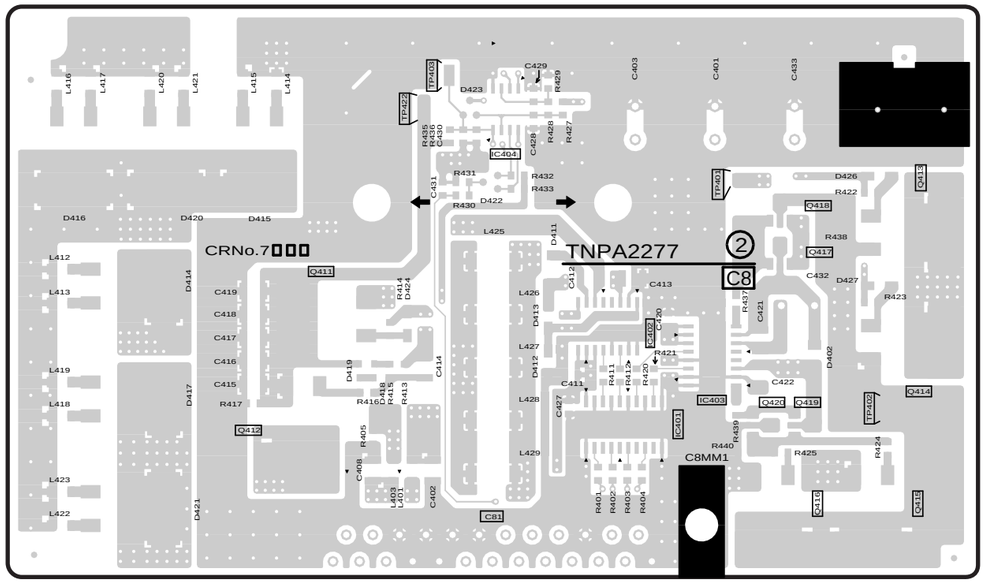
12.15. C8-Board

C8-BOARD (FOIL SIDE)
TNPA2277



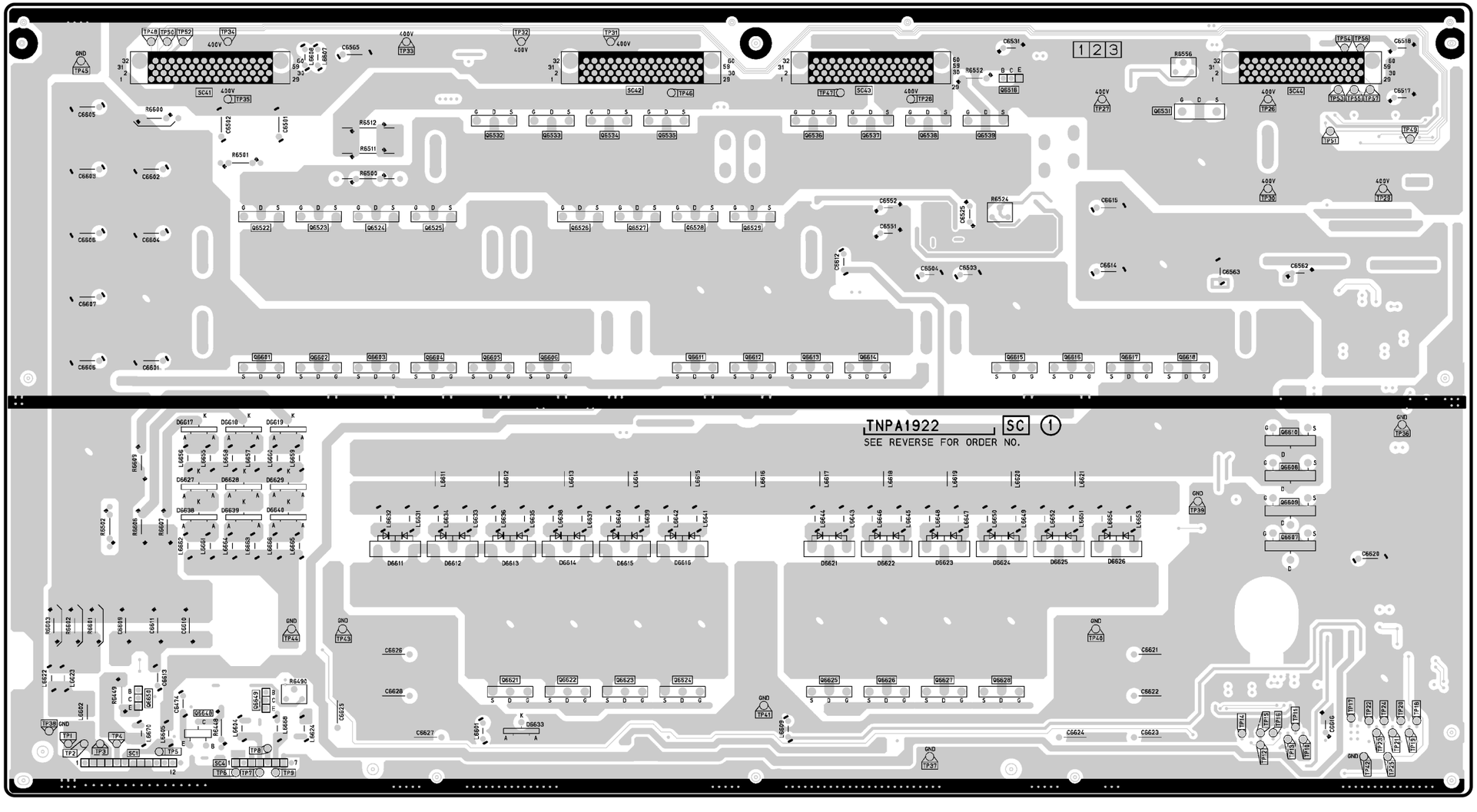


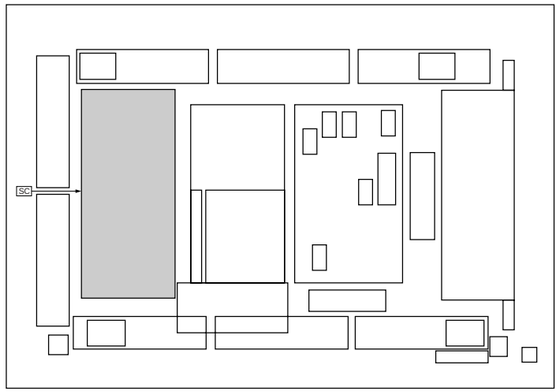
C8-BOARD (COMPONENT SIDE)
TNPA2277



12.16. SC-Board

SC-BOARD (FOIL SIDE)
TNPA1922





PARTS LOCATION

SC-BOARD (FOIL SIDE)

TRANSISTOR

Q6510	F-5
Q6522	B-4
Q6523	C-4
Q6524	C-4
Q6525	C-4
Q6526	D-4
Q6527	D-4
Q6528	E-4
Q6529	E-4
Q6531	G-5
Q6532	D-5
Q6533	D-5
Q6534	D-5
Q6535	E-5
Q6536	E-5
Q6537	F-5
Q6538	F-5
Q6539	F-5
Q6601	B-3
Q6602	C-3
Q6603	C-3
Q6604	C-3
Q6605	D-3
Q6606	D-3
Q6607	H-2
Q6608	H-3
Q6609	H-3
Q6610	H-3
Q6611	E-3
Q6612	E-3
Q6613	E-3
Q6614	F-3
Q6615	F-3
Q6615	G-3
Q6616	G-3
Q6617	G-3
Q6618	G-3
Q6621	D-2
Q6622	D-2
Q6623	D-2
Q6624	E-2
Q6625	F-2
Q6626	F-2
Q6627	F-2
Q6628	F-2
Q6648	B-1
Q6649	B-2
Q6650	B-2

TEST POINT

TP1	A-1
TP2	A-1
TP3	B-1
TP4	B-1
TP5	B-1
TP6	B-1
TP7	B-1
TP8	B-1
TP9	B-1
TP10	H-1
TP11	H-1
TP12	H-1
TP13	H-1
TP14	H-1
TP15	H-1
TP16	H-1
TP17	H-1
TP18	I-1
TP19	I-1
TP20	I-1
TP21	I-1
TP22	H-1
TP23	I-1
TP24	I-1
TP25	I-1
TP26	H-5
TP27	G-5
TP28	F-5
TP29	I-4
TP30	H-4
TP31	D-5
TP32	D-5
TP33	C-5
TP34	B-5
TP35	B-5
TP36	I-3
TP37	F-1
TP38	A-1
TP39	G-3
TP40	G-2
TP41	E-1
TP42	H-1
TP43	C-2
TP44	C-2
TP45	A-5
TP47	F-5
TP48	B-5
TP49	I-5
TP50	B-5
TP51	H-5
TP52	B-5
TP53	H-5
TP54	H-5
TP55	H-5
TP56	H-5
TP57	H-5

ADDRESS INFORMATION

PARTS LOCATION

SC-BOARD (COMPONENT SIDE)

IC

IC6500	A-5
IC6501	A-5
IC6502	B-4
IC6503	A-4
IC6504	B-4
IC6505	A-5
IC6506	B-5
IC6507	D-4
IC6509	B-4
IC6510	D-5
IC6511	F-5
IC6512	A-4
IC6521	D-4
IC6531	C-5
IC6541	B-4
IC6601	F-3
IC6602	E-1
IC6603	D-1
IC6604	C-3
IC6605	B-2
IC6606	A-2
IC6607	B-2
IC6608	G-2

TRANSISTOR

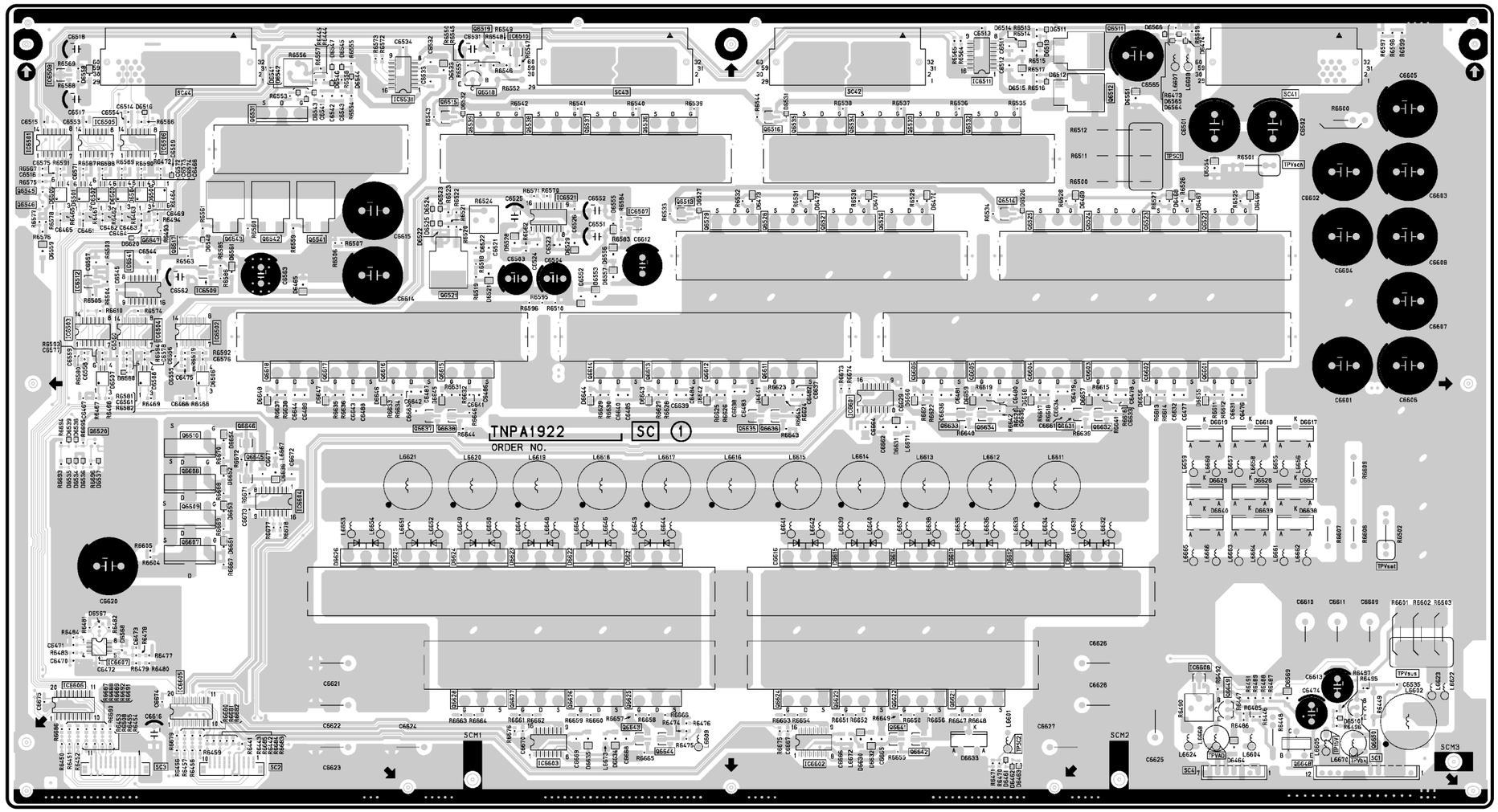
Q6511	G-5
Q6512	G-5
Q6513	E-4
Q6514	F-4
Q6515	C-5
Q6516	E-5
Q6517	B-4
Q6518	D-5
Q6519	D-5
Q6521	C-4
Q6522	G-4
Q6523	G-4
Q6524	G-4
Q6525	G-4
Q6526	F-4
Q6527	E-4
Q6528	A-3
Q6528	E-4
Q6529	E-4
Q6531	B-5
Q6532	F-5
Q6533	F-5
Q6534	F-5
Q6535	E-5
Q6536	D-5
Q6537	D-5
Q6538	D-5
Q6539	D-5
Q6541	C-4
Q6542	B-4
Q6543	B-4
Q6545	A-4
Q6546	A-4
Q6601	G-3
Q6602	G-3
Q6603	G-3
Q6604	G-3
Q6605	F-3
Q6606	F-3
Q6607	B-2
Q6608	B-3
Q6609	B-3
Q6610	B-3
Q6611	E-3
Q6612	E-3
Q6613	D-3
Q6614	D-3
Q6615	C-3
Q6616	C-3
Q6617	C-3
Q6618	B-3
Q6621	F-2
Q6622	F-2
Q6624	E-2
Q6625	D-2
Q6626	D-2
Q6627	D-2
Q6628	C-2
Q6631	G-3
Q6632	G-3
Q6633	F-3
Q6634	F-3
Q6635	E-3
Q6636	E-3
Q6641	F-1
Q6642	F-1
Q6643	D-1
Q6644	E-1
Q6645	B-3
Q6646	B-3
Q6648	H-1
Q6649	H-2
Q6650	H-1

TEST POINT

TP15V	H-1
TPSC1	G-5
TPSC2	F-1
TPVAD	H-1
TPVbk	H-1
TPVscn	H-5
TPVset	H-2

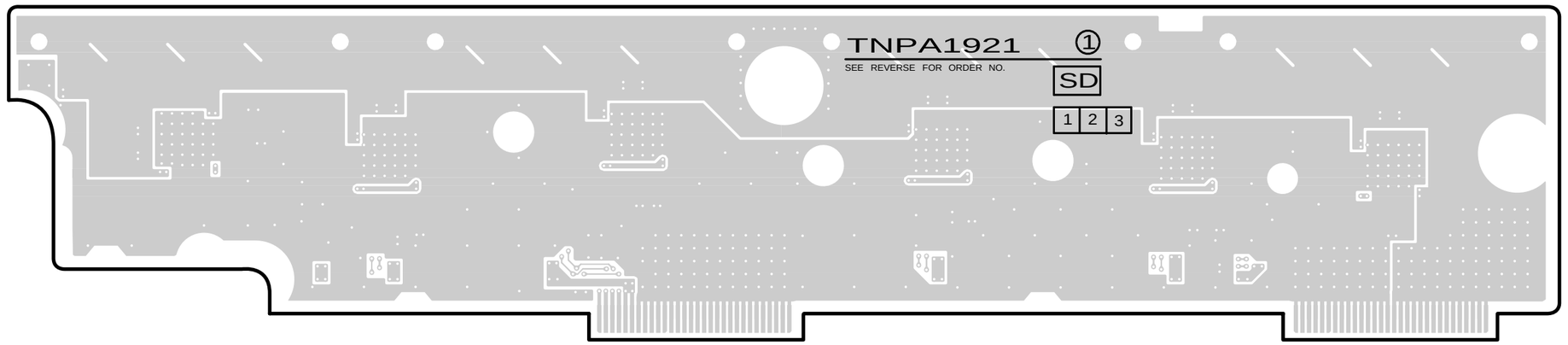
ADDRESS INFORMATION

SC-BOARD (COMPONENT SIDE)
TNPA1922

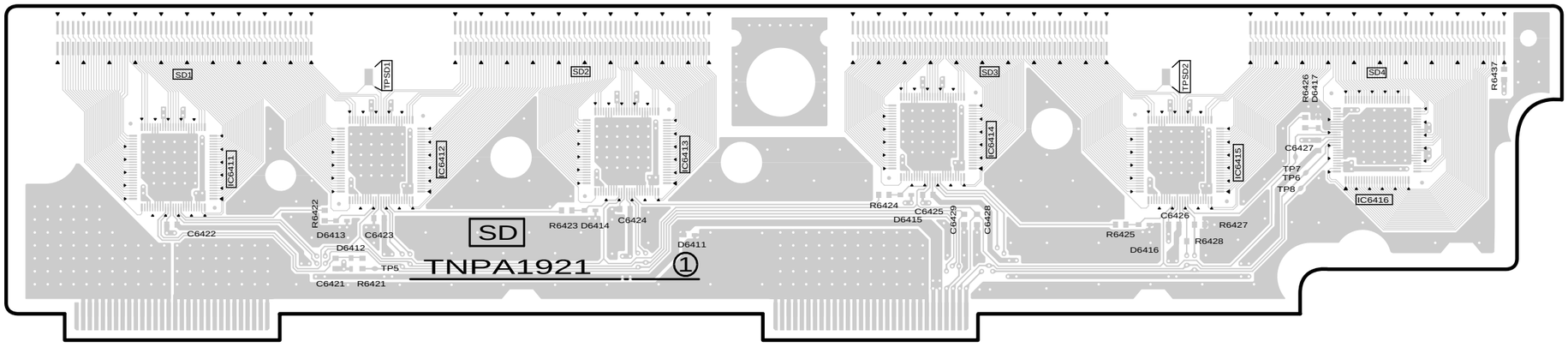


12.17. SD-Board

SD-BOARD (FOIL SIDE)
TNPA1921

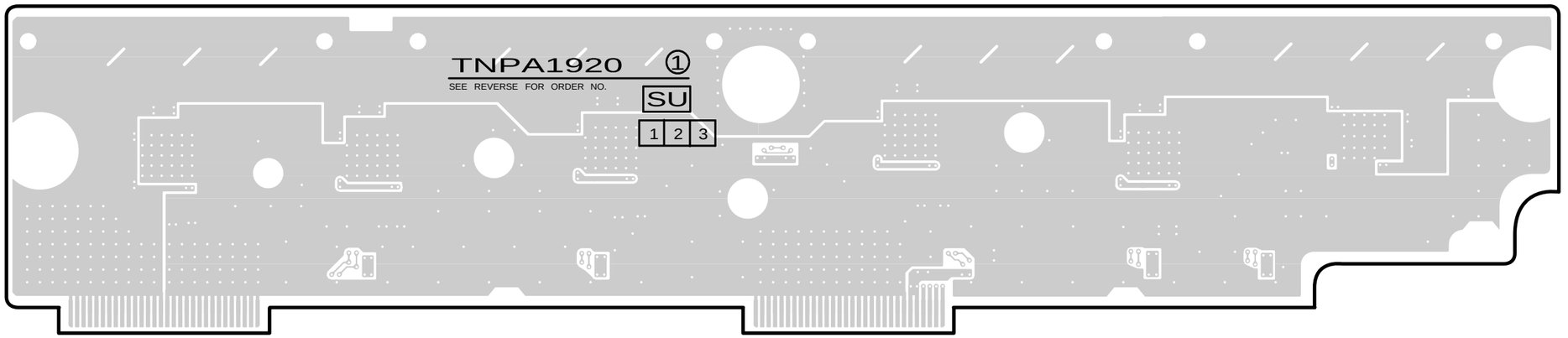


SD-BOARD (COMPONENT SIDE)
TNPA1921

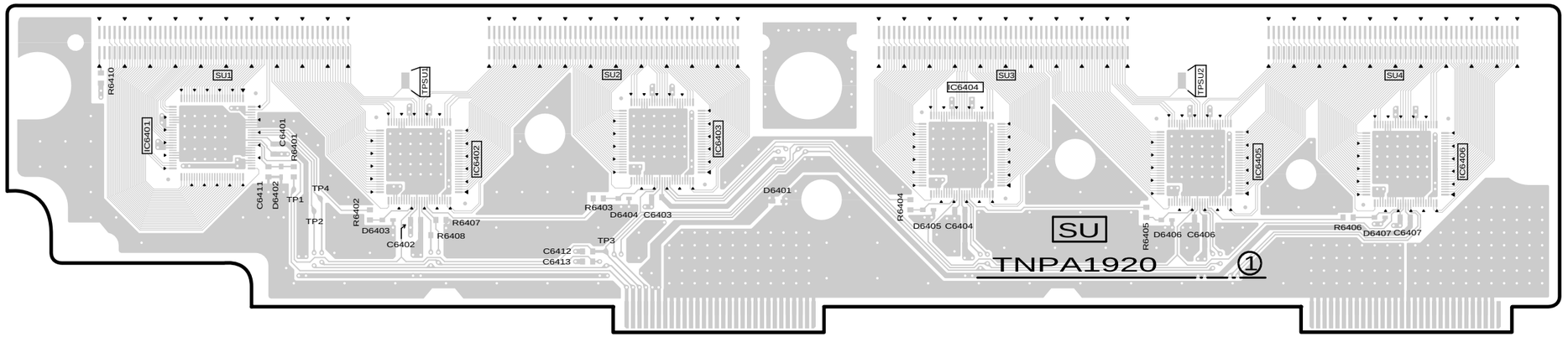


12.18. SU-Board

SU-BOARD (FOIL SIDE)
TNPA1920

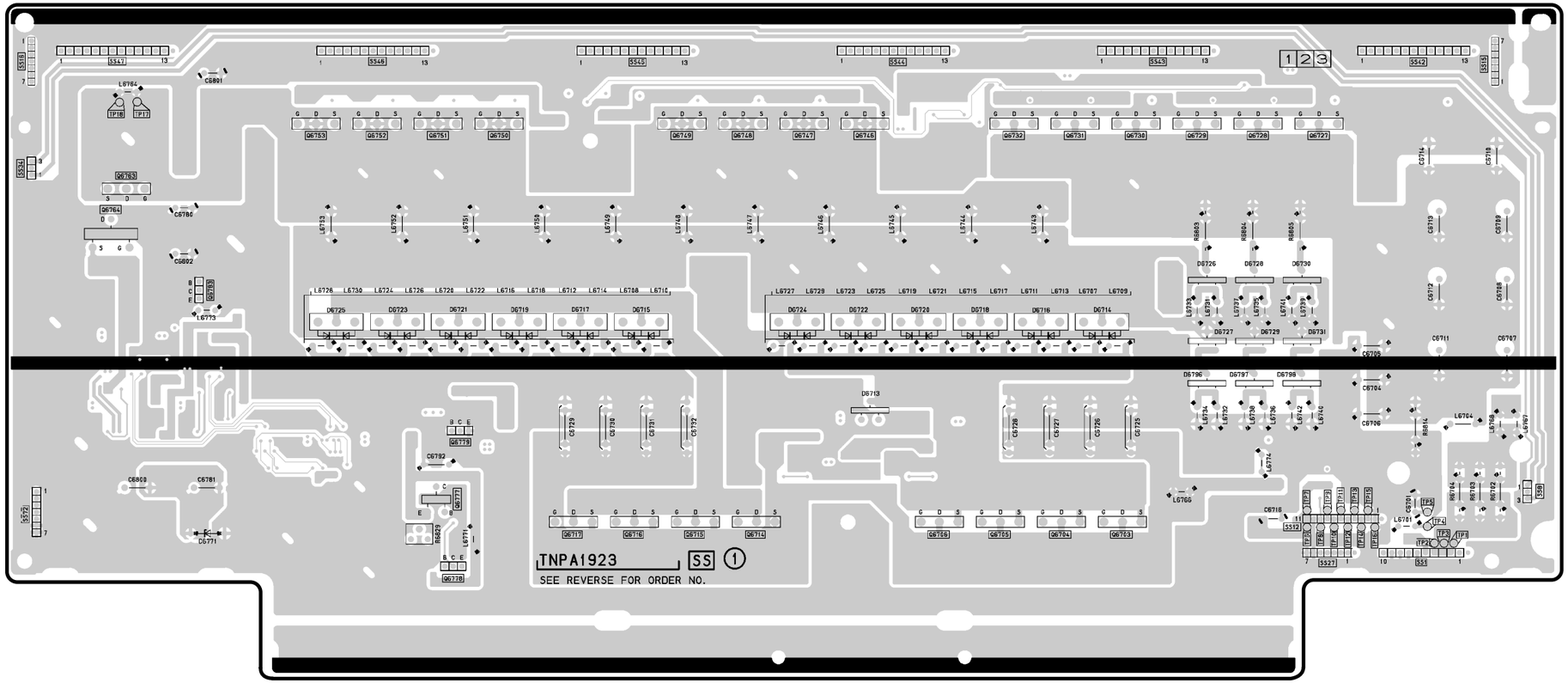


SU-BOARD (COMPONENT SIDE)
TNPA1920

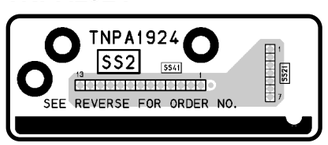


12.19. SS, SS2 and SS3-Board

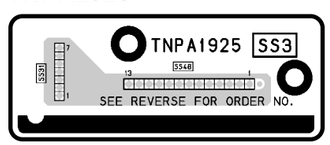
SS-BOARD (FOIL SIDE)
TNPA1923

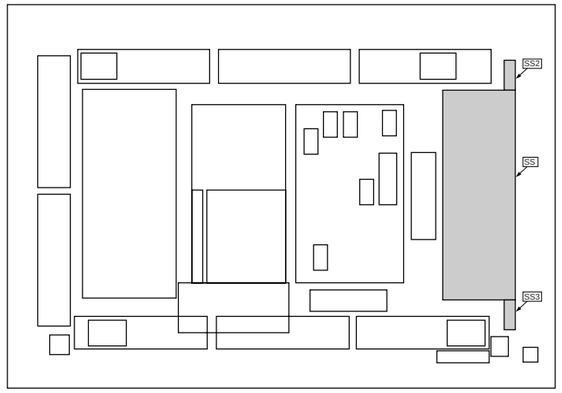


SS2-BOARD (FOIL SIDE)
TNPA1924



SS3-BOARD (FOIL SIDE)
TNPA1925





PARTS LOCATION

SS-BOARD (FOIL SIDE)

TRANSISTOR	
Q6703	F-3
Q6704	F-3
Q6705	F-3
Q6706	F-3
Q6714	E-3
Q6715	D-3
Q6716	D-3
Q6717	D-3
Q6727	G-5
Q6728	G-5
Q6729	G-5
Q6730	F-5
Q6731	F-5
Q6732	F-5
Q6746	E-5
Q6747	E-5
Q6748	E-5
Q6749	D-5
Q6750	C-5
Q6751	C-5
Q6752	C-5
Q6753	C-5
Q6764	A-5
Q6769	B-5
Q6777	C-3
Q6778	C-3
Q6779	C-4
Q6783	B-4

TEST POINT	
TP1	H-1
TP2	H-1
TP3	H-1
TP4	H-1
TP5	H-1
TP6	G-3
TP7	G-3
TP8	G-3
TP9	G-3
TP10	G-3
TP11	G-3
TP12	H-1
TP13	H-1
TP14	H-1
TP15	H-1
TP17	B-5
TP18	B-5

ADDRESS INFORMATION

PARTS LOCATION

SS-BOARD (COMPONENT SIDE)

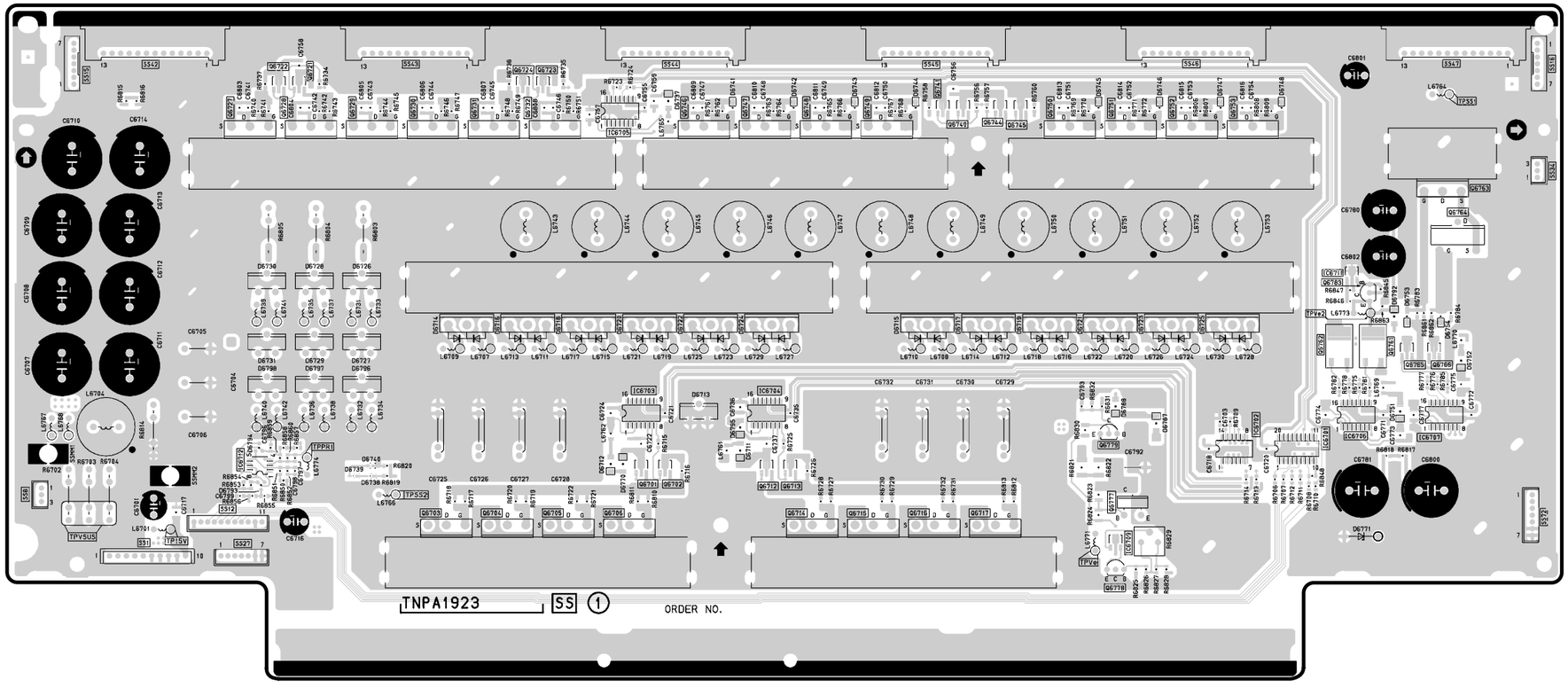
IC	
IC6701	G-3
IC6702	G-4
IC6703	D-4
IC6704	E-4
IC6705	D-5
IC6706	H-4
IC6707	H-4
IC6709	F-3
IC6711	G-4
IC6712	B-3

TRANSISTOR	
Q6701	D-3
Q6702	D-3
Q6703	C-3
Q6704	C-3
Q6705	D-3
Q6706	D-3
Q6712	E-3
Q6713	E-3
Q6714	E-3
Q6715	E-3
Q6716	E-3
Q6717	F-3
Q6721	B-5
Q6722	B-5
Q6723	D-5
Q6724	D-5
Q6727	B-5
Q6728	B-5
Q6729	C-5
Q6730	C-5
Q6731	C-5
Q6732	D-5
Q6740	F-5
Q6741	F-5
Q6744	F-5
Q6746	D-5
Q6747	E-5
Q6748	E-5
Q6749	E-5
Q6750	F-5
Q6751	F-5
Q6752	G-5
Q6753	G-5
Q6761	H-4
Q6762	G-4
Q6763	H-5
Q6764	H-5
Q6765	H-4
Q6766	H-4
Q6777	F-3
Q6778	F-3
Q6779	F-3
Q6783	G-4

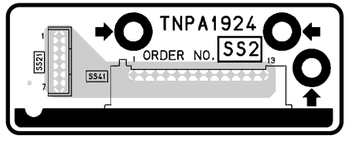
TEST POINT	
TP15V	B-3
TPPR1	B-3
TPSS1	H-5
TPSS2	C-3
TPVe	F-3
TPVe2	G-4
TPVSUS	A-3

ADDRESS INFORMATION

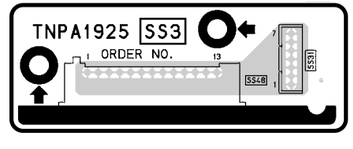
SS-BOARD (COMPONENT SIDE)
TNPA1923



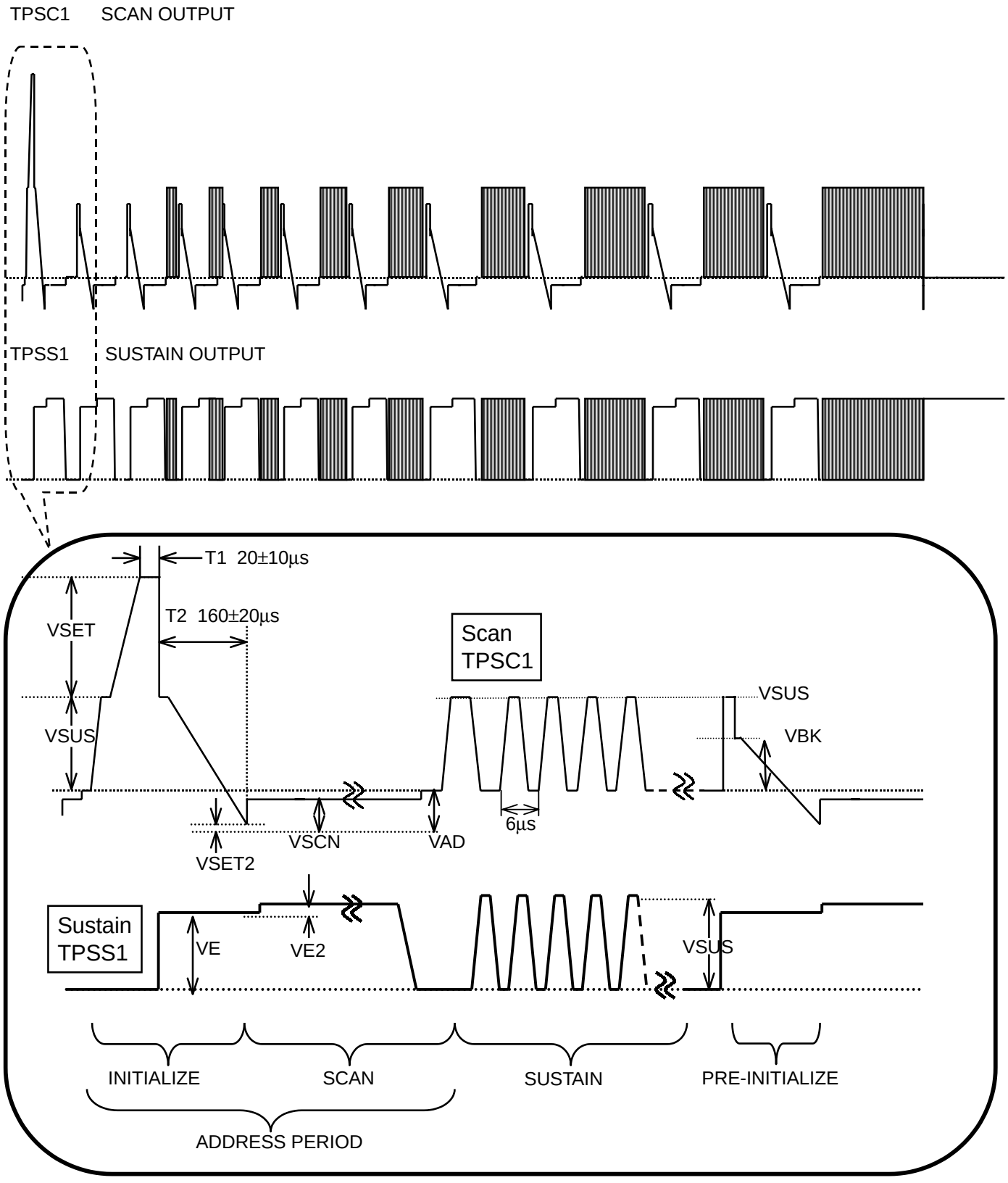
SS2-BOARD (COMPONENT SIDE)
TNPA1924



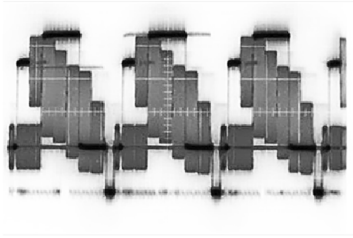
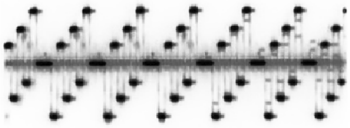
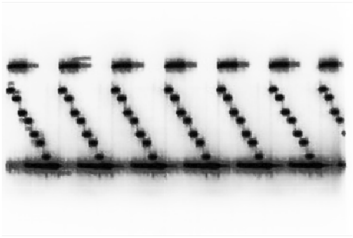
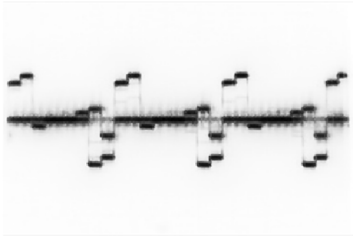
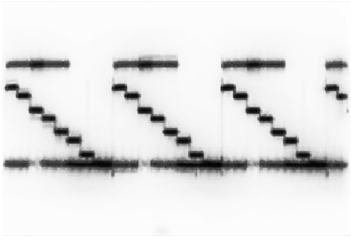
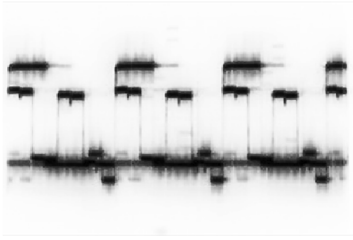
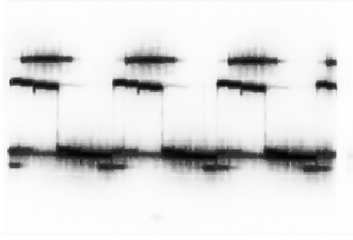
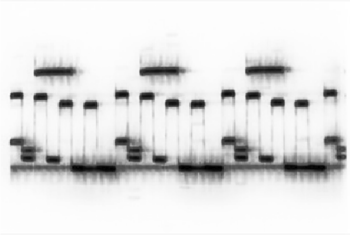
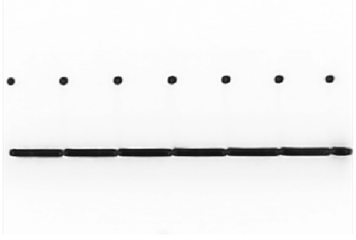
SS3-BOARD (COMPONENT SIDE)
TNPA1925



14 Panel drive signal wave form

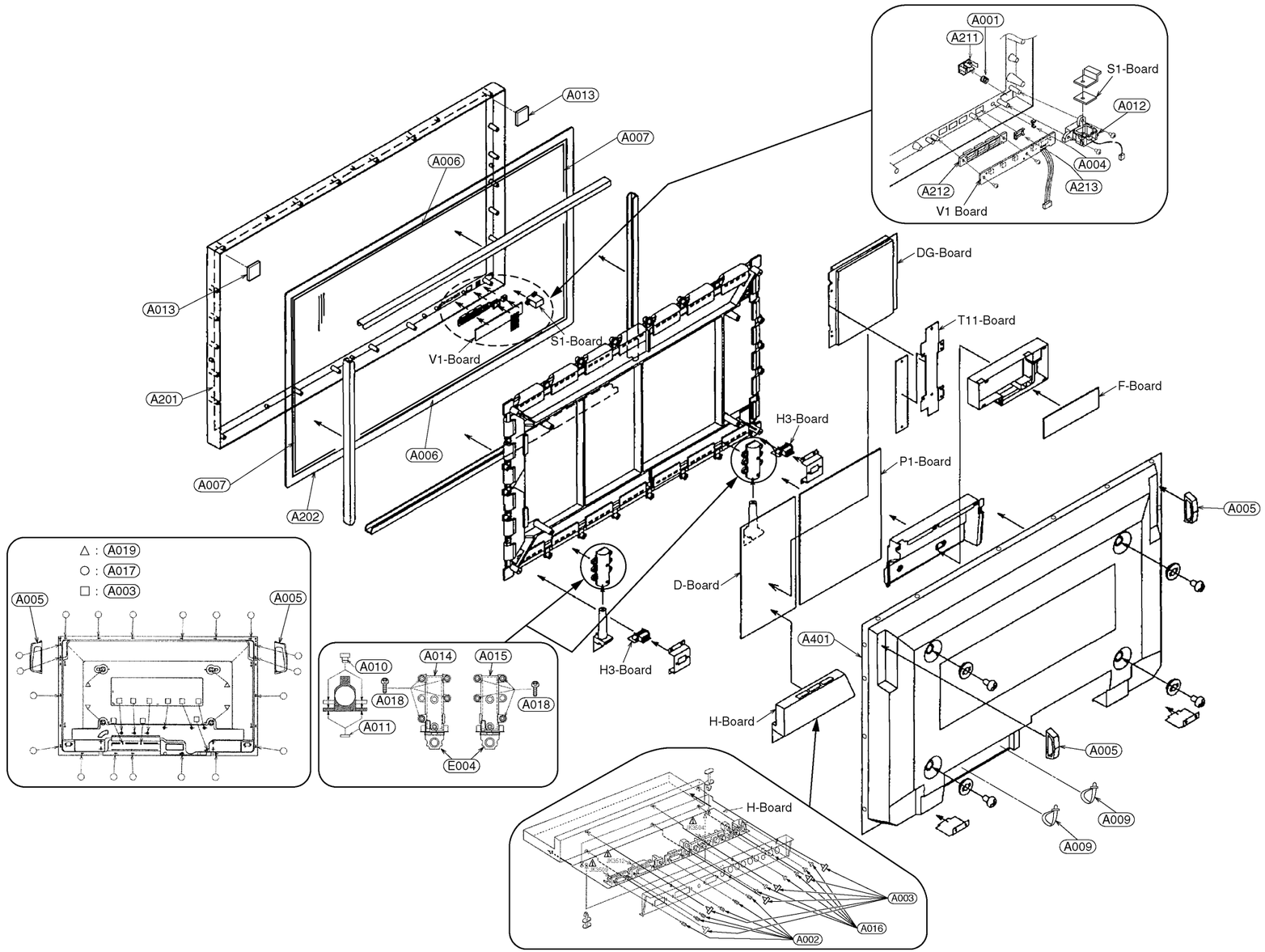


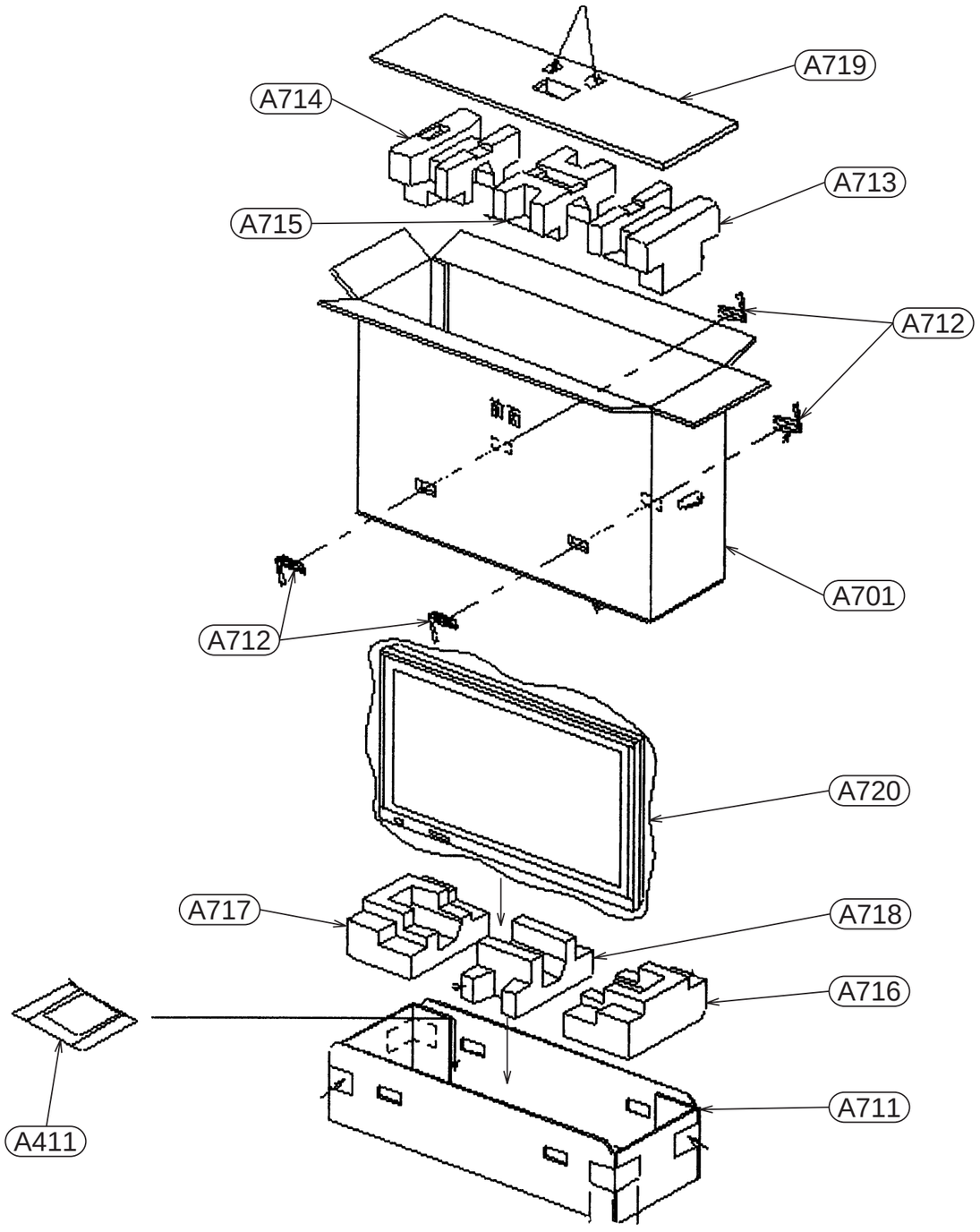
15 Signal Waveform

TP8004 (DG-BOARD)  1.5 Vp-p (20µsec) V	TS8001 (DG-BOARD)  0.7 Vp-p (50µsec) B/PB	TS8002 (DG-BOARD)  0.6 Vp-p (50µsec) G/Y
TS8003 (DG-BOARD)  0.6 Vp-p (20µsec) R/PR	TP8003 (DG-BOARD)  0.6 Vp-p (20µsec) V/Y	TPD20 (D-BOARD)  0.7 Vp-p (20µsec) R
TPD21 (D-BOARD)  0.7 Vp-p (20µsec) G	TPD22 (D-BOARD)  0.6 Vp-p (20µsec) B	TP8016 (DG-BOARD)  2.0 Vp-p (50µsec) HD
TP8014 (DG-BOARD) 2.4 Vp-p (10msec) VD		

∗Signal : PAL. composite. signal.

16 Mechanical Parts Location




A719
A714
A713
A715
A712
A712
A701
A720
A717
A718
A716
A711
A411

17 Mechanical Replacement Parts List

Loc. No.	Part No.	Description	Reference No.	Remarks
A001	72000661	SPRING	TESD031	
A002	72000662	SCREW	THEA068N	
A003	72000663	SCREW	THEL023Z	
A004	72000664	LED PANEL	TKKC5105	
A005	72000665	HANDLE	TKRA20501	
A006	72000666	CUSHION	TMKG252	
A007	72000667	CUSHION	TMKG253	
A008	72000668	INSULATOR	TMKX236	
A009	72000669	CABLE STRAP	TMME108	
A010	72000670	SPACER (A)	TMMX062	
A011	72000671	SPACER (B)	TMMX063	
A012	72000672	POWER BUTTOM BRACKET	TMWC006-1	
A013	72000673	ESC LOCKING TAB	TMZA5003	
A014	72000674	STAND POLE BRACKET(L)	TMZX5015	
A015	72000675	STAND POLE BRACKET(R)	TMZX5015-2	
A016	72000676	SCREW	XTV3+8J	
A017	72000677	SCREW	XYN4+F38FZ	
A018	72000678	SCREW	XYN5+C20	
A019	72000679	SCREW	XYN8+F20FZ	
A201	72000706	ESCUTCHEON	TTEA0071	50WP16R. H. A.EA
A201	72000729	ESCUTCHEON	TTEA0079	50WP16C
A201	72000735	ESCUTCHEON	TTEA0064	50HP81
A202	72000707	FRONT GLASS	TKGA5057	50WP16R. H. A.EA
A202	72000736	FRONT GLASS	TKGA5059	50HP81.50WP16C
A211	72000708	POWER BUTTON	TBXA28205	50WP16R. H. A. C.EA
A211	72000737	POWER BUTTON	TBXA28204	50HP81
A212	72000709	BUTTON	TBXA28505A	50WP16R. H. A. C.EA
A212	72000738	BUTTON	TBXA28504	50HP81
A213	72000710	REMOCON RECEIVE PANEL	TKPA43801	50WP16R. H. A. C.EA
A213	72000739	REMOCON RECEIVE PANEL	TKPA43802	50HP81
A401	72000711	REAR COVER	TTUA0491	50WP16R. H. A.EA
A401	72000730	REAR COVER	TTUA0492	50WP16C
A401	72000740	REAR COVER	TTUA0448	50HP81 ⚠
A411	72000712	FAN BACK	TQZC148	50WP16R.H. A.C
A411	72000721	FAN BACK	TQZC180	50WP16EA
A411	72000741	FAN BACK	TQZC126	50HP81 ⚠
A701	72000714	CARTON BOX	TPCA97121	50WP16H ⚠
A701	72000722	CARTON BOX	TPCA97138	50WP16EA ⚠
A701	72000728	CARTON BOX	TPCA97120	50WP16R ⚠
A701	72000731	CARTON BOX	TPCA97123	50WP16C ⚠
A701	72000733	CARTON BOX	TPCA97122	50WP16A ⚠
A701	72000742	CARTON BOX	TPCA97113	50HP81 ⚠
A711	72000680	CARTON BOX(BOTTOM)	TPCA97201	
A712	72000681	JOINT	TPD169487	
A713	72000682	CUSHION(UPPER RIGHT)	TPDA0510	
A714	72000683	CUSHION(UPPER LEFT)	TPDA0511	
A715	72000684	CUSHION(UPPER CENTER)	TPDA0512	
A716	72000685	CUSHION(BOTTOM RIGHT)	TPDA0513	
A717	72000686	CUSHION(BOTTOM LEFT)	TPDA0514	
A718	72000687	CUSHION(BOTTOM CENTER)	TPDA0515	
A719	72000688	PAD(TOP)	TPDF0536	
A720	72000689	PROTECT COVER	TPEH007-3	
A721	72000690	POLY BAG	TPEH125	
E001	72000691	FANCHOKE	FBL06A12LS	

Loc. No.	Part No.	Description	Reference No.	Remarks
E002	72000692	NOIS FILTER	J0KG00000042	
E003	72000693	NOIS FILTER	KRCBC160928B	
E004	72000694	INSULATOR BLOCK	TXFKK010L32	
F801	72000715	FUSE 250V 6.3A	K5Y632B00001	50WP16R. H. A.C.EA ⚠
F801	72000743	FUSE 250V 8A	K5Y802B00001	50HP81 ⚠
P001	72000695	CABLE (BULE)	K2ZZ02900010	
P002	72000696	CABLE (RED)	K2ZZ02900011	
P003	72000697	CABLE (BLACK)	K2ZZ02900012	
P004	72000698	BNC-RCA CONVERSION CONNECTOR	TJS1A4270	
P005	72000699	CABLE	TSXL143	
P801	72000716	AC CORD	K2CT3DH00007	50WP16H ⚠
P801	72000723	AC CORD	K2CN3DH00001	50WP16R. EA ⚠
P801	72000732	AC CORD	K2CK3DH00007	50WP16C ⚠
P801	72000734	AC CORD	K2CK3DH00002	50WP16A ⚠
P801	72000744	AC CORD	K2CG3DH00025	50HP81 ⚠
P802	72000700	AC INLET	TXAJS010L32	⚠
V901	72000701	DISPLAY PANEL ASS,Y	MC127W27P1	
W001	72000702	SPEAKER LEADWIRE	TPASK04	
Y101	72000717	INSTRUCTION BOOK(ENGLISH/UK)	TQZW154	50WP16R.H. A.C.EA
Y101	72000745	INSTRUCTION BOOK(ENGLISH/US)	TQZW142	50HP81
Y102	72000718	INSTRUCTION BOOK(CHINESE)	TQZW155	50WP16R.H. A.C
Y103	72000719	INSTRUCTION BOOK(ARABIAN)	TQZW156	50WP16R.H. A.C
Y104	72000720	INSTRUCTION BOOK(RUSSIAN)	TQZW157	50WP16R.H. A.C
Y105	72000724	INSTRUCTION BOOK(FRANCH)	TQZW168	50WP16EA
Y105	72000746	INSTRUCTION BOOK(FRANCH)	TQZW143	50HP81
Y106	72000725	INSTRUCTION BOOK(GERMAN)	TQZW169	50WP16EA
Y107	72000726	INSTRUCTION BOOK(ITALIAN)	TQZW170	50WP16EA
Y108	72000727	INSTRUCTION BOOK(SPANISH)	TQZW171	50WP16EA
Y108	72000747	INSTRUCTION BOOK(SPANISH)	TQZW144	50HP81
Y161	72000703	REMOTE CONTROL	EUR646527	
Y162	72000704	REMOCON BATTERY COVER	UR51EC810	
Y163	72000705	POLY BAG	XZBT6506	

18 Replacement Parts List

18.1. Relpacement Parts List Notes

Important Safety Notice

Components identified by ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.

Abbreviation of part name and description

1. Resistor

Example:

ERD25TJ104 C 100KOHM, J, 1/4W

Type Allowance

2. Capacitor

Example:

ECKF1H103ZF C 0.01UF, Z, 50V

Type Allowance

Type	Allowance
C : Carbon F : Fuse M : Metal Oxide Metal FIlm S : Solid W : Wire Wound	F : ±1% G : ±2% J : ±5% K : ±10% M : ±20%

Type	Allowance
C : Ceramic E : Electrolytic P : Polyester Polyprop lene T : Tantalum	C : ±0.25pF D : ±0.5pF F : ±1pF G : ±3pF J : ±5pF K : ±10pF L : ±15pF M : ±20pF P : +100%, -0% Z : +80%, -20%

18.2. Electrical Replacement Parts List

Loc. No.	Part No.	Description	Reference No.	Remarks
C081	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C2312	72000191	CAPACITOR, C 0.01UF, Z, 50V	ECJ2VF1H103Z	
C2313	72000192	CAPACITOR, E 47UF, 50V	ECA1HHG470	
C2314	72000193	CAPACITOR, E 47UF, 16V	ECA1CHG470	
C2316	72000194	CAPACITOR, P 0.47UF, J, 50V	ECQV1H474JM	
C2317	72000194	CAPACITOR, P 0.47UF, J, 50V	ECQV1H474JM	
C2318	72000195	CAPACITOR, C 560PF, J, 50V	ECJ2XC1H561J	
C2319	72000195	CAPACITOR, C 560PF, J, 50V	ECJ2XC1H561J	
C2320	72000196	CAPACITOR, C 0.1UF, Z, 50V	ECJ2VF1H104Z	
C2321	72000196	CAPACITOR, C 0.1UF, Z, 50V	ECJ2VF1H104Z	
C2322	72000196	CAPACITOR, C 0.1UF, Z, 50V	ECJ2VF1H104Z	
C2323	72000197	CAPACITOR, E 220UF, 50V	ECA1HM221	
C2324	72000196	CAPACITOR, C 0.1UF, Z, 50V	ECJ2VF1H104Z	
C2325	72000197	CAPACITOR, E 220UF, 50V	ECA1HM221	
C2326	72000198	CAPACITOR, C 220PF, J, 50V	ECJ2XC1H221J	
C2327	72000198	CAPACITOR, C 220PF, J, 50V	ECJ2XC1H221J	
C2328	72000196	CAPACITOR, C 0.1UF, Z, 50V	ECJ2VF1H104Z	
C2329	72000196	CAPACITOR, C 0.1UF, Z, 50V	ECJ2VF1H104Z	
C2330	72000199	CAPACITOR, C 4700PF, K, 50V	ECJ2XB1H472K	
C2331	72000200	CAPACITOR, C 100PF, J, 50V	ECJ2XC1H101J	
C2332	72000199	CAPACITOR, C 4700PF, K, 50V	ECJ2XB1H472K	
C2333	72000200	CAPACITOR, C 100PF, J, 50V	ECJ2XC1H101J	
C2334	72000201	CAPACITOR, C 2.2UF, 16V	TCUY1C225KBM	
C2335	72000201	CAPACITOR, C 2.2UF, 16V	TCUY1C225KBM	
C2336	72000202	CAPACITOR, C 0.047UF, K, 50V	ECJ2XB1H473K	
C2337	72000202	CAPACITOR, C 0.047UF, K, 50V	ECJ2XB1H473K	
C2338	72000203	CAPACITOR, C 4.7UF, Z, 16V	ECJ3XF1C475Z	
C2339	72000203	CAPACITOR, C 4.7UF, Z, 16V	ECJ3XF1C475Z	
C2340	72000196	CAPACITOR, C 0.1UF, Z, 50V	ECJ2VF1H104Z	
C2341	72000196	CAPACITOR, C 0.1UF, Z, 50V	ECJ2VF1H104Z	
C2342	72000196	CAPACITOR, C 0.1UF, Z, 50V	ECJ2VF1H104Z	
C2343	72000196	CAPACITOR, C 0.1UF, Z, 50V	ECJ2VF1H104Z	
C2344	72000204	CAPACITOR, E 1000UF, 20V	EEUGZ1D102SB	
C2345	72000204	CAPACITOR, E 1000UF, 20V	EEUGZ1D102SB	
C2346	72000204	CAPACITOR, E 1000UF, 20V	EEUGZ1D102SB	
C2347	72000204	CAPACITOR, E 1000UF, 20V	EEUGZ1D102SB	
C2348	72000191	CAPACITOR, C 0.01UF, Z, 50V	ECJ2VF1H103Z	
C2349	72000203	CAPACITOR, C 4.7UF, Z, 16V	ECJ3XF1C475Z	
C2350	72000203	CAPACITOR, C 4.7UF, Z, 16V	ECJ3XF1C475Z	

Loc. No.	Part No.	Description	Reference No.	Remarks
C2401	72000205	CAPACITOR, C 0.01UF, K, 50V	ECJ2XB1H103K	
C2402	72000916	CAPACITOR, E 47UF, 35V	ECA1VM470	
C2408	72000207	CAPACITOR, C 150PF, J, 50V	ECJ2XC1H151J	
C2409	72000208	CAPACITOR, E 10UF, 25V	EEANA1E100	
C2410	72000209	CAPACITOR, C 0.015UF, K, 50V	ECJ2XB1H153K	
C2411	72000209	CAPACITOR, C 0.015UF, K, 50V	ECJ2XB1H153K	
C2412	72000205	CAPACITOR, C 0.01UF, K, 50V	ECJ2XB1H103K	
C2413	72000205	CAPACITOR, C 0.01UF, K, 50V	ECJ2XB1H103K	
C2414	72000210	CAPACITOR, E 100UF, 16V	ECA1CM101	
C2415	72000211	CAPACITOR, C 1UF, 16V	TCUY1C105KBM	
C2416	72000211	CAPACITOR, C 1UF, 16V	TCUY1C105KBM	
C2417	72000203	CAPACITOR, C 4.7UF, Z, 16V	ECJ3XF1C475Z	
C2418	72000211	CAPACITOR, C 1UF, 16V	TCUY1C105KBM	
C2419	72000212	CAPACITOR, E 10UF, 16V	EEVHB1C100	
C2420	72000213	CAPACITOR, C 1UF, K, 25V	TCUY1E105KBM	
C2421	72000212	CAPACITOR, E 10UF, 16V	EEVHB1C100	
C2422	72000203	CAPACITOR, C 4.7UF, Z, 16V	ECJ3XF1C475Z	
C2423	72000214	CAPACITOR, C 0.012UF, K, 50V	ECJ2XB1H123K	
C2426	72000214	CAPACITOR, C 0.012UF, K, 50V	ECJ2XB1H123K	
C2427	72000212	CAPACITOR, E 10UF, 16V	EEVHB1C100	
C2428	72000202	CAPACITOR, C 0.047UF, K, 50V	ECJ2XB1H473K	
C2429	72000210	CAPACITOR, E 100UF, 16V	ECA1CM101	
C2431	72000191	CAPACITOR, C 0.01UF, Z, 50V	ECJ2VF1H103Z	
C2433	72000215	CAPACITOR, C 0.039UF, K, 50V	ECJ2XB1H393K	
C2434	72000216	CAPACITOR, C 0.022UF, K, 50V	ECJ2XB1H223K	
C2435	72000205	CAPACITOR, C 0.01UF, K, 50V	ECJ2XB1H103K	
C2436	72000211	CAPACITOR, C 1UF, 16V	TCUY1C105KBM	
C2437	72000210	CAPACITOR, E 100UF, 16V	ECA1CM101	
C2440	72000217	CAPACITOR, C 437UF, 16V	TCUY1C475ZFM	
C2441	72000217	CAPACITOR, C 437UF, 16V	TCUY1C475ZFM	
C2450	72000212	CAPACITOR, E 10UF, 16V	EEVHB1C100	
C2451	72000218	CAPACITOR, E 4.7UF, 25V	EEVHB1E4R7	
C2452	72000219	CAPACITOR, C 5600PF, K, 50V	ECJ2XB1H562K	
C2453	72000196	CAPACITOR, C 0.1UF, Z, 50V	ECJ2VF1H104Z	
C2454	72000218	CAPACITOR, E 4.7UF, 25V	EEVHB1E4R7	
C2455	72000210	CAPACITOR, E 100UF, 16V	ECA1CM101	
C2457	72000218	CAPACITOR, E 4.7UF, 25V	EEVHB1E4R7	
C2458	72000220	CAPACITOR, C 1000PF, J, 50V	ECJ2XC1H102J	
C2459	72000211	CAPACITOR, C 1UF, 16V	TCUY1C105KBM	

Loc. No.	Part No.	Description	Reference No.	Remarks
C2460	72000202	CAPACITOR, C 0.047UF, K, 50V	ECJ2XB1H473K	
C2461	72000220	CAPACITOR, C 1000PF, J, 50V	ECJ2XC1H102J	
C2462	72000220	CAPACITOR, C 1000PF, J, 50V	ECJ2XC1H102J	
C2463	72000202	CAPACITOR, C 0.047UF, K, 50V	ECJ2XB1H473K	
C2464	72000221	CAPACITOR, C 0.033UF, K, 50V	ECJ2VB1H333K	
C2466	72000211	CAPACITOR, C 1UF, 16V	TCUY1C105KBM	
C2467	72000211	CAPACITOR, C 1UF, 16V	TCUY1C105KBM	
C2474	72000211	CAPACITOR, C 1UF, 16V	TCUY1C105KBM	
C3501	72000222	CAPACITOR, C 0.1UF, K, 25V	ECJ2XB1E104K	
C3502	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C3504	72000222	CAPACITOR, C 0.1UF, K, 25V	ECJ2XB1E104K	
C3507	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C3508	72000225	CAPACITOR, C 1UF, Z, 16V	ECJ2VF1C105Z	
C3509	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C3510	72000226	CAPACITOR, C 0.1UF, Z, 25V	ECJ2VF1E104Z	
C3511	72000227	CAPACITOR, C 33PF, J, 50V	ECJ1XC1H330J	
C3512	72000227	CAPACITOR, C 33PF, J, 50V	ECJ1XC1H330J	
C3513	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C3514	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C3515	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C3516	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C3517	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C3518	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C3520	72000191	CAPACITOR, C 0.01UF, Z, 50V	ECJ2VF1H103Z	
C3521	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C3523	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C3524	72000191	CAPACITOR, C 0.01UF, Z, 50V	ECJ2VF1H103Z	
C3525	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C3526	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C3527	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C3528	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C3529	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C3530	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C3531	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C3532	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C3533	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C3534	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C3535	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C3536	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C3537	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C3538	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C3539	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C3540	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C3541	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C3542	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C3543	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C3544	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C3545	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C3546	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C3547	72000191	CAPACITOR, C 0.01UF, Z, 50V	ECJ2VF1H103Z	
C3548	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C3549	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C3550	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C3551	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C3552	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C3553	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C3554	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C3555	72000225	CAPACITOR, C 1UF, Z, 16V	ECJ2VF1C105Z	
C3556	72000225	CAPACITOR, C 1UF, Z, 16V	ECJ2VF1C105Z	
C3557	72000225	CAPACITOR, C 1UF, Z, 16V	ECJ2VF1C105Z	
C3558	72000225	CAPACITOR, C 1UF, Z, 16V	ECJ2VF1C105Z	
C3559	72000225	CAPACITOR, C 1UF, Z, 16V	ECJ2VF1C105Z	
C3560	72000225	CAPACITOR, C 1UF, Z, 16V	ECJ2VF1C105Z	
C3561	72000225	CAPACITOR, C 1UF, Z, 16V	ECJ2VF1C105Z	
C3562	72000225	CAPACITOR, C 1UF, Z, 16V	ECJ2VF1C105Z	
C3563	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C3564	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C3565	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C3566	72000191	CAPACITOR, C 0.01UF, Z, 50V	ECJ2VF1H103Z	
C3567	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C3568	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C3569	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C3570	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C3571	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C3572	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C3573	72000191	CAPACITOR, C 0.01UF, Z, 50V	ECJ2VF1H103Z	
C3574	72000225	CAPACITOR, C 1UF, Z, 16V	ECJ2VF1C105Z	
C3575	72000225	CAPACITOR, C 1UF, Z, 16V	ECJ2VF1C105Z	
C3576	72000228	CAPACITOR, E 10UF, 50V	EEVHB1H100	
C3577	72000191	CAPACITOR, C 0.01UF, Z, 50V	ECJ2VF1H103Z	

Loc. No.	Part No.	Description	Reference No.	Remarks
C3578	72000196	CAPACITOR, C 0.1UF, Z, 50V	ECJ2VF1H104Z	
C3579	72000196	CAPACITOR, C 0.1UF, Z, 50V	ECJ2VF1H104Z	
C3580	72000196	CAPACITOR, C 0.1UF, Z, 50V	ECJ2VF1H104Z	
C3581	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C3582	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C3583	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C3584	72000196	CAPACITOR, C 0.1UF, Z, 50V	ECJ2VF1H104Z	
C3585	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C3587	72000229	CAPACITOR, C 6.8UF, 6.3V	TCUY0J685MBM	
C3590	72000225	CAPACITOR, C 1UF, Z, 16V	ECJ2VF1C105Z	
C3591	72000913	CAPACITOR, C 1UF, 16V	TCUY1C105ZFN	
C3592	72000913	CAPACITOR, C 1UF, 16V	TCUY1C105ZFN	
C3593	72000226	CAPACITOR, C 0.1UF, Z, 25V	ECJ2VF1E104Z	
C3594	72000913	CAPACITOR, C 1UF, 16V	TCUY1C105ZFN	
C3595	72000913	CAPACITOR, C 1UF, 16V	TCUY1C105ZFN	
C400	72000230	CAPACITOR, C 2200PF,	ECKDNA222ME	
C401	72000230	CAPACITOR, C 2200PF,	ECKDNA222ME	
C402	72000922	CAPACITOR, P 1UF, 250V	ECQU2A105MGA	⚠
C403	72000231	CAPACITOR, P 0.047UF, J, 50V	ECQB1H473JF	
C404	72000230	CAPACITOR, C 2200PF,	ECKDNA222ME	
C405	72000232	CAPACITOR, C 680PF, K, 50V	ECKF1H681KB	
C406	72000233	CAPACITOR, P 1UF, J,400V	ECWF4105JB	
C407	72000234	CAPACITOR, C 100PF, K, 1KV	ECKD3A101KBP	
C408	72000234	CAPACITOR, C 100PF, K, 1KV	ECKD3A101KBP	
C409	72000235	CAPACITOR, C 1000PF, K, 1KV	ECKD3A102KBP	
C410	72000235	CAPACITOR, C 1000PF, K, 1KV	ECKD3A102KBP	
C411	72000236	CAPACITOR, E 330UF, 450V	EETHC2W331L	
C412	72000236	CAPACITOR, E 330UF, 450V	EETHC2W331L	
C413	72000237	CAPACITOR, P 0.068UF, M,250V	ECQU2A683MN	
C415	72000238	CAPACITOR, E 470UF, 25V	EEUFC1E471	
C416	72000239	CAPACITOR, E 22UF, 450V	ECA2WHG220	
C417	72000236	CAPACITOR, E 330UF, 450V	EETHC2W331L	
C418	72000236	CAPACITOR, E 330UF, 450V	EETHC2W331L	
C419	72000240	CAPACITOR, C 3900PF, K, 2KV	ECKD3D392KBP	
C421	72000241	CAPACITOR, P 0.1UF, K, 1KV	ECQE10104KF	
C422	72000908	CAPACITOR, E 220UF, 50V	ECA1HHG221	
C423	72000243	CAPACITOR, E 22UF, 50V	ECA1HHG220	
C424	72000244	CAPACITOR, P 0.1UF, J, 50V	ECQV1H104JM	
C425	72000245	CAPACITOR, E 47UF, 25V	ECA1EHG470	
C426	72000246	CAPACITOR, C 820PF, K,500V	ECKD2H821KB2	

Loc. No.	Part No.	Description	Reference No.	Remarks
C427	72000234	CAPACITOR, C 100PF, K, 1KV	ECKD3A101KBP	
C428	72000244	CAPACITOR, P 0.1UF, J, 50V	ECQV1H104JM	
C429	72000908	CAPACITOR, E 220UF, 50V	ECA1HHG221	
C430	72000914	CAPACITOR, P 0.047UF, J, 50V	ECQV1H473JM	
C431	72000232	CAPACITOR, C 680PF, K, 50V	ECKF1H681KB	
C432	72000231	CAPACITOR, P 0.047UF, J, 50V	ECQB1H473JF	
C433	72000248	CAPACITOR, C 1000PF, K, 2KV	ECKD3D102KBP	
C434	72000248	CAPACITOR, C 1000PF, K, 2KV	ECKD3D102KBP	
C435	72000235	CAPACITOR, C 1000PF, K, 1KV	ECKD3A102KBP	
C437	72000249	CAPACITOR, C 560PF, K,500V	ECKD2H561KB2	
C438	72000249	CAPACITOR, C 560PF, K,500V	ECKD2H561KB2	
C439	72000245	CAPACITOR, E 47UF, 25V	ECA1EHG470	
C440	72000250	CAPACITOR, E 470UF, 16V	ECA1CHG471	
C441	72000234	CAPACITOR, C 100PF, K, 1KV	ECKD3A101KBP	
C442	72000234	CAPACITOR, C 100PF, K, 1KV	ECKD3A101KBP	
C443	72000911	CAPACITOR, E 1000UF, 25V	ECA1EHG102	
C444	72000234	CAPACITOR, C 100PF, K, 1KV	ECKD3A101KBP	
C445	72000234	CAPACITOR, C 100PF, K, 1KV	ECKD3A101KBP	
C447	72000252	CAPACITOR, P 0.01UF, J, 50V	ECQB1H103JF	
C448	72000252	CAPACITOR, P 0.01UF, J, 50V	ECQB1H103JF	
C449	72000253	CAPACITOR, E 3300UF, 25V	EEUFC1E332	
C451	72000254	CAPACITOR, P 2700PF, J, 50V	ECQB1H272JF	
C452	72000255	CAPACITOR, E 2700UF, 80V	EC0S1KA272CB	
C453	72000256	CAPACITOR, E 2200UF, 25V	ECA1EHG222	
C454	72000256	CAPACITOR, E 2200UF, 25V	ECA1EHG222	
C455	72000252	CAPACITOR, P 0.01UF, J, 50V	ECQB1H103JF	
C458	72000257	CAPACITOR, C 0.01UF, Z,500V	ECKD2H103ZU	
C462	72000258	CAPACITOR, E 4700UF, 16V	EEUFC1C472	
C463	72000245	CAPACITOR, E 47UF, 25V	ECA1EHG470	
C464	72000235	CAPACITOR, C 1000PF, K, 1KV	ECKD3A102KBP	
C465	72000235	CAPACITOR, C 1000PF, K, 1KV	ECKD3A102KBP	
C466	72000235	CAPACITOR, C 1000PF, K, 1KV	ECKD3A102KBP	
C467	72000243	CAPACITOR, E 22UF, 50V	ECA1HHG220	
C468	72000906	CAPACITOR, C 0.01UF, Z, 50V	ECKF1H103ZF	
C469	72000260	CAPACITOR, E 4.7UF, 50V	ECA1HHG4R7	
C472	72000243	CAPACITOR, E 22UF, 50V	ECA1HHG220	
C475	72000261	CAPACITOR, C 1200PF, 500V	ECKDHT122KB	
C476	72000262	CAPACITOR, E 1000UF, 250V	EETHC2E102K	
C477	72000262	CAPACITOR, E 1000UF, 250V	EETHC2E102K	
C478	72000262	CAPACITOR, E 1000UF, 250V	EETHC2E102K	

Loc. No.	Part No.	Description	Reference No.	Remarks
C479	72000262	CAPACITOR, E 1000UF, 250V	EETHC2E102K	
C480	72000262	CAPACITOR, E 1000UF, 250V	EETHC2E102K	
C481	72000243	CAPACITOR, E 22UF, 50V	ECA1HHG220	
C484	72000261	CAPACITOR, C 1200PF, 500V	ECKDHT122KB	
C485	72000263	CAPACITOR, E 6800UF, 10V	EEUFC1A682	
C486	72000264	CAPACITOR, E 22UF, 200V	ECA2DHG220	
C487	72000265	CAPACITOR, P 1UF, J, 50V	ECQV1H105JM	
C488	72000266	CAPACITOR, P 0.056UF, J, 50V	ECQB1H563JF	
C489	72000264	CAPACITOR, E 22UF, 200V	ECA2DHG220	
C491	72000255	CAPACITOR, E 2700UF, 80V	EC0S1KA272CB	
C492	72000267	CAPACITOR, C 3300PF, K,500V	ECKDHT332KB	
C494	72000266	CAPACITOR, P 0.056UF, J, 50V	ECQB1H563JF	
C495	72000268	CAPACITOR, C 470PF, K, 50V	ECKF1H471KB	
C496	72000268	CAPACITOR, C 470PF, K, 50V	ECKF1H471KB	
C497	72000906	CAPACITOR, C 0.01UF, Z, 50V	ECKF1H103ZF	
C498	72000254	CAPACITOR, P 2700PF, J, 50V	ECQB1H272JF	
C499	72000269	CAPACITOR, P 470PF, J, 50V	ECQB1H471JF	
C500	72000245	CAPACITOR, E 47UF, 25V	ECA1EHG470	
C502	72000265	CAPACITOR, P 1UF, J, 50V	ECQV1H105JM	
C503	72000252	CAPACITOR, P 0.01UF, J, 50V	ECQB1H103JF	
C504	72000245	CAPACITOR, E 47UF, 25V	ECA1EHG470	
C505	72000912	CAPACITOR, E 100UF, 16V	ECA1CHG101	
C507	72000912	CAPACITOR, E 100UF, 16V	ECA1CHG101	
C509	72000253	CAPACITOR, E 3300UF, 25V	EEUFC1E332	
C510	72000265	CAPACITOR, P 1UF, J, 50V	ECQV1H105JM	
C511	72000271	CAPACITOR, P 1UF, J,630V	ECQE6105JF	
C512	72000271	CAPACITOR, P 1UF, J,630V	ECQE6105JF	
C513	72000272	CAPACITOR, E 10UF, 160V	ECA2CHG100	
C515	72000273	CAPACITOR, E 33UF, 50V	EEUFC1H330	
C516	72000914	CAPACITOR, P 0.047UF, J, 50V	ECQV1H473JM	
C517	72000273	CAPACITOR, E 33UF, 50V	EEUFC1H330	
C518	72000914	CAPACITOR, P 0.047UF, J, 50V	ECQV1H473JM	
C519	72000274	CAPACITOR, C 0.022UF, Z, 50V	ECKF1H223ZF	
C520	72000274	CAPACITOR, C 0.022UF, Z, 50V	ECKF1H223ZF	
C521	72000906	CAPACITOR, C 0.01UF, Z, 50V	ECKF1H103ZF	
C600	72000243	CAPACITOR, E 22UF, 50V	ECA1HHG220	
C601	72000265	CAPACITOR, P 1UF, J, 50V	ECQV1H105JM	
C602	72000232	CAPACITOR, C 680PF, K, 50V	ECKF1H681KB	
C603	72000265	CAPACITOR, P 1UF, J, 50V	ECQV1H105JM	
C604	72000265	CAPACITOR, P 1UF, J, 50V	ECQV1H105JM	

Loc. No.	Part No.	Description	Reference No.	Remarks
C606	72000265	CAPACITOR, P 1UF, J, 50V	ECQV1H105JM	
C607	72000260	CAPACITOR, E 4.7UF, 50V	ECA1HHG4R7	
C608	72000220	CAPACITOR, C 1000PF, J, 50V	ECJ2XC1H102J	
C609	72000252	CAPACITOR, P 0.01UF, J, 50V	ECQB1H103JF	
C610	72000275	CAPACITOR, P 0.022UF, J, 50V	ECQB1H223JF	
C611	72000276	CAPACITOR, P 0.033UF, J, 50V	ECQB1H333JF	
C612	72000921	CAPACITOR, C 22PF, J, 50V	ECCF1H220JC	
C613	72000265	CAPACITOR, P 1UF, J, 50V	ECQV1H105JM	
C614	72000268	CAPACITOR, C 470PF, K, 50V	ECKF1H471KB	
C615	72000268	CAPACITOR, C 470PF, K, 50V	ECKF1H471KB	
C616	72000268	CAPACITOR, C 470PF, K, 50V	ECKF1H471KB	
C617	72000268	CAPACITOR, C 470PF, K, 50V	ECKF1H471KB	
C618	72000278	CAPACITOR, P 0.22UF, J, 50V	ECQV1H224JM	
C619	72000231	CAPACITOR, P 0.047UF, J, 50V	ECQB1H473JF	
C635	72000918	CAPACITOR, P 0.01UF, J,400V	ECQM4103JZ	
C636	72000280	CAPACITOR, E 10UF, 50V	ECA1HHG100	
C637	72000281	CAPACITOR, C 4700PF, K, 1KV	ECKD3A472KBP	
C638	72000281	CAPACITOR, C 4700PF, K, 1KV	ECKD3A472KBP	
C639	72000231	CAPACITOR, P 0.047UF, J, 50V	ECQB1H473JF	
C650	72000906	CAPACITOR, C 0.01UF, Z, 50V	ECKF1H103ZF	
C651	72000906	CAPACITOR, C 0.01UF, Z, 50V	ECKF1H103ZF	
C652	72000906	CAPACITOR, C 0.01UF, Z, 50V	ECKF1H103ZF	
C653	72000244	CAPACITOR, P 0.1UF, J, 50V	ECQV1H104JM	
C654	72000282	CAPACITOR, C 100PF, K, 50V	ECKF1H101KB	
C655	72000243	CAPACITOR, E 22UF, 50V	ECA1HHG220	
C656	72000283	CAPACITOR, E 1UF, 50V	ECA1HHG010	
C657	72000284	CAPACITOR, P 1000PF, J, 50V	ECQB1H102JF	
C658	72000285	CAPACITOR, P 680PF, J, 50V	ECQB1H681JF	
C659	72000286	CAPACITOR, C 1000PF, K, 50V	ECJ2XB1H102K	
C660	72000252	CAPACITOR, P 0.01UF, J, 50V	ECQB1H103JF	
C661	72000284	CAPACITOR, P 1000PF, J, 50V	ECQB1H102JF	
C730	72000285	CAPACITOR, P 680PF, J, 50V	ECQB1H681JF	
C731	72000910	CAPACITOR, C 220PF, K, 50V	ECKF1H221KB	
C732	72000243	CAPACITOR, E 22UF, 50V	ECA1HHG220	
C733	72000284	CAPACITOR, P 1000PF, J, 50V	ECQB1H102JF	
C734	72000909	CAPACITOR, E 220UF, 50V	EEUFC1H221	
C735	72000244	CAPACITOR, P 0.1UF, J, 50V	ECQV1H104JM	
C736	72000289	CAPACITOR, C 0.22UF, K, 16V	ECJ2VB1C224K	
C737	72000290	CAPACITOR, P 0.33UF, J, 50V	ECQB1H334JF	
C738	72000284	CAPACITOR, P 1000PF, J, 50V	ECQB1H102JF	

Loc. No.	Part No.	Description	Reference No.	Remarks
C739	72000284	CAPACITOR, P 1000PF, J, 50V	ECQB1H102JF	
C740	72000284	CAPACITOR, P 1000PF, J, 50V	ECQB1H102JF	
C741	72000243	CAPACITOR, E 22UF, 50V	ECA1HHG220	
C742	72000252	CAPACITOR, P 0.01UF, J, 50V	ECQB1H103JF	
C743	72000244	CAPACITOR, P 0.1UF, J, 50V	ECQV1H104JM	
C744	72000244	CAPACITOR, P 0.1UF, J, 50V	ECQV1H104JM	
C745	72000244	CAPACITOR, P 0.1UF, J, 50V	ECQV1H104JM	
C750	72000906	CAPACITOR, C 0.01UF, Z, 50V	ECKF1H103ZF	
C751	72000906	CAPACITOR, C 0.01UF, Z, 50V	ECKF1H103ZF	
C752	72000915	CAPACITOR, E 470UF, 25V	ECA1EHG471	
C754	72000245	CAPACITOR, E 47UF, 25V	ECA1EHG470	
C755	72000906	CAPACITOR, C 0.01UF, Z, 50V	ECKF1H103ZF	
C756	72000245	CAPACITOR, E 47UF, 25V	ECA1EHG470	
C757	72000906	CAPACITOR, C 0.01UF, Z, 50V	ECKF1H103ZF	
C759	72000205	CAPACITOR, C 0.01UF, K, 50V	ECJ2XB1H103K	
C775	72000906	CAPACITOR, C 0.01UF, Z, 50V	ECKF1H103ZF	
C776	72000906	CAPACITOR, C 0.01UF, Z, 50V	ECKF1H103ZF	
C778	72000283	CAPACITOR, E 1UF, 50V	ECA1HHG010	
C779	72000283	CAPACITOR, E 1UF, 50V	ECA1HHG010	
C780	72000283	CAPACITOR, E 1UF, 50V	ECA1HHG010	
C781	72000283	CAPACITOR, E 1UF, 50V	ECA1HHG010	
C782	72000292	CAPACITOR, E 100UF, 25V	ECA1EHG101	
C783	72000245	CAPACITOR, E 47UF, 25V	ECA1EHG470	
C784	72000906	CAPACITOR, C 0.01UF, Z, 50V	ECKF1H103ZF	
C785	72000915	CAPACITOR, E 470UF, 25V	ECA1EHG471	
C786	72000906	CAPACITOR, C 0.01UF, Z, 50V	ECKF1H103ZF	
C787	72000245	CAPACITOR, E 47UF, 25V	ECA1EHG470	
C8001	72000225	CAPACITOR, C 1UF, Z, 16V	ECJ2VF1C105Z	
C8002	72000225	CAPACITOR, C 1UF, Z, 16V	ECJ2VF1C105Z	
C8003	72000225	CAPACITOR, C 1UF, Z, 16V	ECJ2VF1C105Z	
C8004	72000225	CAPACITOR, C 1UF, Z, 16V	ECJ2VF1C105Z	
C8005	72000293	CAPACITOR, C 22PF, J, 16V	ECJ2YF1C225Z	
C8006	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C8007	72000294	CAPACITOR, E 47UF, 6.3V	EEVHP0J470	
C8008	72000294	CAPACITOR, E 47UF, 6.3V	EEVHP0J470	
C8009	72000294	CAPACITOR, E 47UF, 6.3V	EEVHP0J470	
C8010	72000294	CAPACITOR, E 47UF, 6.3V	EEVHP0J470	
C8011	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8012	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8013	72000295	CAPACITOR, C 1UF, K, 16V	ECJ3XB1C105K	
C8014	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C8015	72000295	CAPACITOR, C 1UF, K, 16V	ECJ3XB1C105K	
C8016	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8017	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8018	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8019	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8020	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8021	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C8022	72000917	CAPACITOR, E 470UF, 16V	ECA1CM471	
C8023	72000917	CAPACITOR, E 470UF, 16V	ECA1CM471	
C8024	72000917	CAPACITOR, E 470UF, 16V	ECA1CM471	
C8026	72000295	CAPACITOR, C 1UF, K, 16V	ECJ3XB1C105K	
C8027	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C8029	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8030	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C8031	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8032	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8033	72000297	CAPACITOR, C 2700PF, J, 50V	ECJ2XC1H272J	
C8034	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8035	72000298	CAPACITOR, C 56PF, J, 50V	ECJ2XC1H560J	
C8036	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8037	72000191	CAPACITOR, C 0.01UF, Z, 50V	ECJ2VF1H103Z	
C8038	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C8039	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C8040	72000293	CAPACITOR, C 22PF, J, 16V	ECJ2YF1C225Z	
C8041	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C8042	72000299	CAPACITOR, E 22UF, 25V	EEVHP1E220	
C8044	72000300	CAPACITOR, C 3.3UF, 6.3V	TCUY0J335MBM	
C8045	72000191	CAPACITOR, C 0.01UF, Z, 50V	ECJ2VF1H103Z	
C8046	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8047	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8048	72000300	CAPACITOR, C 3.3UF, 6.3V	TCUY0J335MBM	
C8049	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C8050	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8051	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8052	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8053	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C8054	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8055	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8056	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	

Loc. No.	Part No.	Description	Reference No.	Remarks
C8057	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8058	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8059	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8060	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8061	72000301	CAPACITOR, E 100UF, 6.3V	EEVHB0J101	
C8062	72000301	CAPACITOR, E 100UF, 6.3V	EEVHB0J101	
C8063	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8064	72000201	CAPACITOR, C 2.2UF, 16V	TCUY1C225KBM	
C8067	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8068	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8070	72000919	CAPACITOR, C 470PF, K, 50V	ECJ2XB1H471K	
C8071	72000201	CAPACITOR, C 2.2UF, 16V	TCUY1C225KBM	
C8072	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8073	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8074	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8075	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8076	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C8077	72000217	CAPACITOR, C 437UF, 16V	TCUY1C475ZFM	
C8078	72000205	CAPACITOR, C 0.01UF, K, 50V	ECJ2XB1H103K	
C8079	72000205	CAPACITOR, C 0.01UF, K, 50V	ECJ2XB1H103K	
C8080	72000205	CAPACITOR, C 0.01UF, K, 50V	ECJ2XB1H103K	
C8081	72000303	CAPACITOR, C 0.47UF, K, 16V	ECJ3VB1C474K	
C8082	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8083	72000205	CAPACITOR, C 0.01UF, K, 50V	ECJ2XB1H103K	
C8084	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8085	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8086	72001060	CAPACITOR, C 22UF, J, 50V	ECJ2XC1H220J	
C8087	72000305	CAPACITOR, C 12PF, J, 50V	ECJ2XC1H120J	
C8088	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C8089	72000207	CAPACITOR, C 150PF, J, 50V	ECJ2XC1H151J	
C8090	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8091	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8092	72000191	CAPACITOR, C 0.01UF, Z, 50V	ECJ2VF1H103Z	
C8093	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C8094	72000220	CAPACITOR, C 1000PF, J, 50V	ECJ2XC1H102J	
C8095	72000225	CAPACITOR, C 1UF, Z, 16V	ECJ2VF1C105Z	
C8096	72000200	CAPACITOR, C 100PF, J, 50V	ECJ2XC1H101J	
C8098	72000306	CAPACITOR, C 1500PF, J, 50V	ECJ2XC1H152J	
C8099	72000207	CAPACITOR, C 150PF, J, 50V	ECJ2XC1H151J	
C8101	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	

Loc. No.	Part No.	Description	Reference No.	Remarks
C8103	72000293	CAPACITOR, C 22PF, J, 16V	ECJ2YF1C225Z	
C8105	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8106	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C8107	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8108	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C8109	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8110	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8111	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C8114	72000299	CAPACITOR, E 22UF, 25V	EEVHP1E220	
C8116	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8119	72000191	CAPACITOR, C 0.01UF, Z, 50V	ECJ2VF1H103Z	
C8124	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C8126	72000307	CAPACITOR, C 0.1UF, K, 16V	ECJ2VB1C104K	
C8127	72000191	CAPACITOR, C 0.01UF, Z, 50V	ECJ2VF1H103Z	
C8129	72000220	CAPACITOR, C 1000PF, J, 50V	ECJ2XC1H102J	
C8130	72000308	CAPACITOR, C 3PF, C, 50V	ECJ2XC1H030C	
C8131	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C8132	72000309	CAPACITOR, C 0.33UF, K, 16V	ECJ3XB1C334K	
C8133	72000198	CAPACITOR, C 220PF, J, 50V	ECJ2XC1H221J	
C8134	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8135	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8136	72000308	CAPACITOR, C 3PF, C, 50V	ECJ2XC1H030C	
C8137	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8138	72000310	CAPACITOR, C 0.047UF, Z, 50V	ECJ2VF1H473Z	
C8140	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8141	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C8146	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C8148	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8149	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8150	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8151	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8152	72000301	CAPACITOR, E 100UF, 6.3V	EEVHB0J101	
C8153	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8155	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C8156	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8158	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8160	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8161	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8162	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C8163	72000919	CAPACITOR, C 470PF, K, 50V	ECJ2XB1H471K	

Loc. No.	Part No.	Description	Reference No.	Remarks
C8164	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8165	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8166	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C8167	72000191	CAPACITOR, C 0.01UF, Z, 50V	ECJ2VF1H103Z	
C8168	72000191	CAPACITOR, C 0.01UF, Z, 50V	ECJ2VF1H103Z	
C8169	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C8170	72000191	CAPACITOR, C 0.01UF, Z, 50V	ECJ2VF1H103Z	
C8171	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C8172	72000191	CAPACITOR, C 0.01UF, Z, 50V	ECJ2VF1H103Z	
C8173	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8174	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C8175	72000907	CAPACITOR, E 47UF, 16V	EEVHB1C470	
C8176	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8177	72000309	CAPACITOR, C 0.33UF, K, 16V	ECJ3XB1C334K	
C8178	72000191	CAPACITOR, C 0.01UF, Z, 50V	ECJ2VF1H103Z	
C8179	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C8184	72000224	CAPACITOR, C 0.1UF, Z, 16V	ECJ2VF1C104Z	
C8185	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C8300	72000190	CAPACITOR, C 10UF, M,6.3V	ECJ3XB0J106M	
C900	72000311	CAPACITOR, P 1UF, 250V	ECQU2A105BN	⚠
C901	72000312	CAPACITOR, P 0.22UF, 250V	ECQU2A224BN	⚠
C903	72000313	CAPACITOR, C 220PF, M,	ECKCNA221MBB	⚠
C904	72000313	CAPACITOR, C 220PF, M,	ECKCNA221MBB	⚠
C905	72000313	CAPACITOR, C 220PF, M,	ECKCNA221MBB	⚠
C906	72000313	CAPACITOR, C 220PF, M,	ECKCNA221MBB	⚠
C907	72000922	CAPACITOR, P 1UF, 250V	ECQU2A105MGA	⚠
C908	72000312	CAPACITOR, P 0.22UF, 250V	ECQU2A224BN	⚠
C909	72000313	CAPACITOR, C 220PF, M,	ECKCNA221MBB	⚠
C910	72000313	CAPACITOR, C 220PF, M,	ECKCNA221MBB	⚠
C911	72000313	CAPACITOR, C 220PF, M,	ECKCNA221MBB	⚠
C912	72000313	CAPACITOR, C 220PF, M,	ECKCNA221MBB	⚠
C921	72000314	CAPACITOR, E 10UF, 450V	ECA2WHG100	
C922	72000315	CAPACITOR, P 0.22UF, K,630V	ECQE6224KF	
C924	72000920	CAPACITOR, C 1000PF, K, 50V	ECKF1H102KB	
C925	72000284	CAPACITOR, P 1000PF, J, 50V	ECQB1H102JF	
C926	72000317	CAPACITOR, P 820PF, J, 50V	ECQB1H821JF	
C927	72000243	CAPACITOR, E 22UF, 50V	ECA1HHG220	
C928	72000244	CAPACITOR, P 0.1UF, J, 50V	ECQV1H104JM	
C929	72000283	CAPACITOR, E 1UF, 50V	ECA1HHG010	
C930	72000748	CAPACITOR, E 220UF, 35V	ECA1VHG221	

Loc. No.	Part No.	Description	Reference No.	Remarks
C932	72000282	CAPACITOR, C 100PF, K, 50V	ECKF1H101KB	
C934	72000252	CAPACITOR, P 0.01UF, J, 50V	ECQB1H103JF	
C935	72000248	CAPACITOR, C 1000PF, K, 2KV	ECKD3D102KBP	
C936	72000248	CAPACITOR, C 1000PF, K, 2KV	ECKD3D102KBP	
C947	72000318	CAPACITOR, P 0.047UF, K,400V	ECQE4473KF	
C950	72000244	CAPACITOR, P 0.1UF, J, 50V	ECQV1H104JM	
C951	72000319	CAPACITOR, P 2200PF, J, 50V	ECQB1H222JF	
C952	72000320	CAPACITOR, E 100UF, 160V	ECA2CHG101	
C953	72000261	CAPACITOR, C 1200PF, 500V	ECKDHT122KB	
C954	72000292	CAPACITOR, E 100UF, 25V	ECA1EHG101	
C955	72000244	CAPACITOR, P 0.1UF, J, 50V	ECQV1H104JM	
C956	72000292	CAPACITOR, E 100UF, 25V	ECA1EHG101	
C957	72000320	CAPACITOR, E 100UF, 160V	ECA2CHG101	
C958	72000320	CAPACITOR, E 100UF, 160V	ECA2CHG101	
C959	72000244	CAPACITOR, P 0.1UF, J, 50V	ECQV1H104JM	
C981	72000321	CAPACITOR, E 560UF, 25V	EEUFC1E561	
C982	72000321	CAPACITOR, E 560UF, 25V	EEUFC1E561	
C983	72000220	CAPACITOR, C 1000PF, J, 50V	ECJ2XC1H102J	
C984	72000205	CAPACITOR, C 0.01UF, K, 50V	ECJ2XB1H103K	
C985	72000220	CAPACITOR, C 1000PF, J, 50V	ECJ2XC1H102J	
C986	72000205	CAPACITOR, C 0.01UF, K, 50V	ECJ2XB1H103K	
C987	72000202	CAPACITOR, C 0.047UF, K, 50V	ECJ2XB1H473K	
C988	72000322	CAPACITOR, E 1500UF, 6.3V	EEUFC0J152	
C989	72000322	CAPACITOR, E 1500UF, 6.3V	EEUFC0J152	
D081	72000323	LED, LNJ107W5PRW	LNJ107W5PRW	
D082	72000324	DIODE, MA8056M, ZENER	MA8056M	
D2301	72000325	DIODE, M1FS4	M1FS4	
D2302	72000325	DIODE, M1FS4	M1FS4	
D2303	72000325	DIODE, M1FS4	M1FS4	
D2304	72000325	DIODE, M1FS4	M1FS4	
D2305	72000326	DIODE, RU4AM	RU4AM	
D2306	72000326	DIODE, RU4AM	RU4AM	
D2307	72000327	DIODE, MA152K	MA152K	
D2308	72000923	DIODE, MA152WK	MA152WK	
D2403	72000327	DIODE, MA152K	MA152K	
D2404	72000327	DIODE, MA152K	MA152K	
D2405	72000329	DIODE, MA152WA	MA152WA	
D3501	72000330	DIODE, MA3056M, ZENER	MA3056M	
D3502	72000330	DIODE, MA3056M, ZENER	MA3056M	
D3503	72000330	DIODE, MA3056M, ZENER	MA3056M	
D3504	72000330	DIODE, MA3056M, ZENER	MA3056M	
D3505	72000331	DIODE, MA153	MA153	
D3506	72000331	DIODE, MA153	MA153	
D3507	72000331	DIODE, MA153	MA153	
D3508	72000331	DIODE, MA153	MA153	
D3509	72000331	DIODE, MA153	MA153	
D3510	72000331	DIODE, MA153	MA153	
D400	72000332	DIODE, EG01	EG01	
D401	72000332	DIODE, EG01	EG01	
D402	72000333	DIODE, RBV-2506	RBV-2506	

Loc. No.	Part No.	Description	Reference No.	Remarks
D403	72000334	DIODE, MA4300H, ZENER	MA4300H	
D404	72000335	DIODE, D1NL20UV70	D1NL20UV70	
D405	72000336	DIODE, MA700A	MA700A	
D406	72000336	DIODE, MA700A	MA700A	
D407	72000337	DIODE, FMLG26S	FMLG26S	
D408	72000334	DIODE, MA4300H, ZENER	MA4300H	
D409	72000335	DIODE, D1NL20UV70	D1NL20UV70	
D410	72000335	DIODE, D1NL20UV70	D1NL20UV70	
D411	72000338	DIODE, MA165	MA165	
D412	72000335	DIODE, D1NL20UV70	D1NL20UV70	
D413	72000335	DIODE, D1NL20UV70	D1NL20UV70	
D414	72000335	DIODE, D1NL20UV70	D1NL20UV70	
D415	72000339	DIODE, RK34	RK34	
D416	72000335	DIODE, D1NL20UV70	D1NL20UV70	
D417	72000335	DIODE, D1NL20UV70	D1NL20UV70	
D418	72000335	DIODE, D1NL20UV70	D1NL20UV70	
D419	72000335	DIODE, D1NL20UV70	D1NL20UV70	
D420	72000340	VARISTOR, ERZV10V621P2	ERZV10V621P2	
D421	72000341	DIODE, S1WBA80	S1WBA80	
D423	72000342	DIODE, AK04	AK04	
D424	72000342	DIODE, AK04	AK04	
D425	72000343	DIODE, ERA22-10	ERA22-10	
D426	72000338	DIODE, MA165	MA165	
D427	72000344	DIODE, RC3B2LFU1	RC3B2LFU1	
D428	72000335	DIODE, D1NL20UV70	D1NL20UV70	
D429	72000345	DIODE, MA2120A, ZENER	MA2120A	
D430	72000346	PHOTO COUPLER, PC123FY2	PC123FY2	⚠
D431	72000346	PHOTO COUPLER, PC123FY2	PC123FY2	⚠
D432	72000337	DIODE, FMLG26S	FMLG26S	
D433	72000347	DIODE, TVSES1C	TVSES1C	
D434	72000339	DIODE, RK34	RK34	
D435	72000348	DIODE, MA167	MA167	
D436	72000334	DIODE, MA4300H, ZENER	MA4300H	
D437	72000337	DIODE, FMLG26S	FMLG26S	
D438	72000337	DIODE, FMLG26S	FMLG26S	
D439	72000349	DIODE, EU02	EU02	
D440	72000349	DIODE, EU02	EU02	
D441	72000350	DIODE, ERC91-02	ERC91-02	
D442	72000350	DIODE, ERC91-02	ERC91-02	
D443	72000351	DIODE, FML-G12S	FML-G12S	
D444	72000351	DIODE, FML-G12S	FML-G12S	
D445	72000334	DIODE, MA4300H, ZENER	MA4300H	
D446	72000352	DIODE, MA4051M, ZENER	MA4051M	
D447	72000335	DIODE, D1NL20UV70	D1NL20UV70	
D450	72000353	DIODE, D1NL40V70	D1NL40V70	
D451	72000354	DIODE, FMLG16S	FMLG16S	
D452	72000354	DIODE, FMLG16S	FMLG16S	
D453	72000354	DIODE, FMLG16S	FMLG16S	
D454	72000354	DIODE, FMLG16S	FMLG16S	
D455	72000338	DIODE, MA165	MA165	
D459	72000336	DIODE, MA700A	MA700A	
D460	72000338	DIODE, MA165	MA165	
D461	72000335	DIODE, D1NL20UV70	D1NL20UV70	
D462	72000339	DIODE, RK34	RK34	
D464	72000353	DIODE, D1NL40V70	D1NL40V70	
D465	72000353	DIODE, D1NL40V70	D1NL40V70	
D466	72000353	DIODE, D1NL40V70	D1NL40V70	
D467	72000338	DIODE, MA165	MA165	
D468	72000338	DIODE, MA165	MA165	
D469	72000338	DIODE, MA165	MA165	
D470	72000338	DIODE, MA165	MA165	
D471	72000348	DIODE, MA167	MA167	
D472	72000335	DIODE, D1NL20UV70	D1NL20UV70	
D473	72000339	DIODE, RK34	RK34	
D474	72000348	DIODE, MA167	MA167	
D475	72000335	DIODE, D1NL20UV70	D1NL20UV70	

Loc. No.	Part No.	Description	Reference No.	Remarks
D476	72000342	DIODE, AK04	AK04	
D477	72000342	DIODE, AK04	AK04	
D478	72000348	DIODE, MA167	MA167	
D479	72000355	DIODE, MA4056M, ZENER	MA4056M	
D482	72000353	DIODE, D1NL40V70	D1NL40V70	
D483	72000338	DIODE, MA165	MA165	
D487	72000356	DIODE, EG01A	EG01A	
D489	72000353	DIODE, D1NL40V70	D1NL40V70	
D500	72000357	DIODE, ERA15-02	ERA15-02	
D504	72000358	DIODE, MA4047H, ZENER	MA4047H	⚠
D505	72000359	DIODE, MA4082L, ZENER	MA4082L	⚠
D506	72000360	DIODE, MA4043H, ZENER	MA4043H	
D507	72000361	DIODE, TMPG10G3	TMPG10G3	
D508	72000360	DIODE, MA4043H, ZENER	MA4043H	
D509	72000362	DIODE, MA4068H, ZENER	MA4068H	
D510	72000361	DIODE, TMPG10G3	TMPG10G3	
D511	72000361	DIODE, TMPG10G3	TMPG10G3	
D512	72000335	DIODE, D1NL20UV70	D1NL20UV70	
D513	72000336	DIODE, MA700A	MA700A	
D514	72000364	DIODE, MA4150M, ZENER	MA4150M	
D515	72000338	DIODE, MA165	MA165	
D601	72000365	THYRISTOR, CR02AM-4	CR02AM-4	
D602	72000366	DIODE, MA3082M, ZENER	MA3082M	
D603	72000327	DIODE, MA152K	MA152K	
D604	72000346	PHOTO COUPLER, PC123FY2	PC123FY2	
D606	72000346	PHOTO COUPLER, PC123FY2	PC123FY2	
D607	72000327	DIODE, MA152K	MA152K	
D608	72000325	DIODE, M1FS4	M1FS4	
D635	72000367	DIODE, MA3062M, ZENER	MA3062M	
D650	72000368	DIODE, MA3140M, ZENER	MA3140M	
D651	72000327	DIODE, MA152K	MA152K	
D654	72000325	DIODE, M1FS4	M1FS4	
D655	72000369	DIODE, MA3068M, ZENER	MA3068M	
D656	72000325	DIODE, M1FS4	M1FS4	
D657	72000370	DIODE, D1FL40F4063	D1FL40F4063	
D658	72000370	DIODE, D1FL40F4063	D1FL40F4063	
D659	72000369	DIODE, MA3068M, ZENER	MA3068M	
D730	72000327	DIODE, MA152K	MA152K	
D731	72000370	DIODE, D1FL40F4063	D1FL40F4063	
D732	72000370	DIODE, D1FL40F4063	D1FL40F4063	
D733	72000370	DIODE, D1FL40F4063	D1FL40F4063	
D734	72000327	DIODE, MA152K	MA152K	
D735	72000371	DIODE, MA3300L, ZENER	MA3300L	
D736	72000370	DIODE, D1FL40F4063	D1FL40F4063	
D737	72000325	DIODE, M1FS4	M1FS4	
D738	72000370	DIODE, D1FL40F4063	D1FL40F4063	
D739	72000371	DIODE, MA3300L, ZENER	MA3300L	
D740	72000370	DIODE, D1FL40F4063	D1FL40F4063	
D741	72000372	DIODE, MA3039H, ZENER	MA3039H	
D742	72000327	DIODE, MA152K	MA152K	
D750	72000373	DIODE, MA3047H, ZENER	MA3047H	

Loc. No.	Part No.	Description	Reference No.	Remarks
D751	72000327	DIODE, MA152K	MA152K	
D752	72000327	DIODE, MA152K	MA152K	
D753	72000374	DIODE, MA3033L, ZENER	MA3033L	
D755	72000370	DIODE, D1FL40F4063	D1FL40F4063	
D756	72000327	DIODE, MA152K	MA152K	
D775	72000327	DIODE, MA152K	MA152K	
D776	72000327	DIODE, MA152K	MA152K	
D777	72000372	DIODE, MA3039H, ZENER	MA3039H	
D8005	72000375	LED, LNJ206R5ARA	LNJ206R5ARA	
D8016	72000327	DIODE, MA152K	MA152K	
D8017	72000327	DIODE, MA152K	MA152K	
D900	72000340	VARISTOR, ERZV10V621P2	ERZV10V621P2	
D921	72000335	DIODE, D1NL20UV70	D1NL20UV70	
D922	72000376	DIODE, TVSA81004	TVSA81004	
D923	72000376	DIODE, TVSA81004	TVSA81004	
D924	72000335	DIODE, D1NL20UV70	D1NL20UV70	
D925	72000378	DIODE, MA4082M, ZENER	MA4082M	
D926	72000378	DIODE, MA4082M, ZENER	MA4082M	
D928	72000361	DIODE, TMPG10G3	TMPG10G3	
D935	72000379	DIODE, EG01C	EG01C	
D936	72000347	DIODE, TVSES1C	TVSES1C	
D941	72000335	DIODE, D1NL20UV70	D1NL20UV70	
D942	72000336	DIODE, MA700A	MA700A	
D943	72000348	DIODE, MA167	MA167	
D944	72000348	DIODE, MA167	MA167	
D945	72000348	DIODE, MA167	MA167	
D946	72000348	DIODE, MA167	MA167	
D947	72000335	DIODE, D1NL20UV70	D1NL20UV70	
D957	72000353	DIODE, D1NL40V70	D1NL40V70	
D981	72000325	DIODE, M1FS4	M1FS4	
D982	72000327	DIODE, MA152K	MA152K	
F900-1	72000380	FUSE HOLDER	EYF-52BC	
F900-2	72000380	FUSE HOLDER	EYF-52BC	
IC2301	72000381	IC, TDA7480, LINEAR	TDA7480	
IC2302	72000381	IC, TDA7480, LINEAR	TDA7480	
IC2304	72000382	IC, PQ09SZ1T	PQ09SZ1T	
IC2401	72000383	IC, BH3866AS, LINEAR	BH3866AS	
IC2402	72000384	IC, NJM2904M, LINEAR	NJM2904M	
IC3502	72000753	IC, 24LC21T, ROM	TVRJ660	50WP16R/H/A/EA/C
IC3502	72000752	IC, 24LC21T, ROM	TVRJ659	50HP81
IC3503	72000386	IC, PIC16F876, ROM	TVRJ400	
IC3504	72000387	IC, MC14052BF, CMOS, GATE ARRAY	MC14052BF	
IC3505	72000388	IC, M52055FP, LINEAR	M52055FP	
IC3506	72000387	IC, MC14052BF, CMOS, GATE ARRAY	MC14052BF	
IC3507	72000389	IC, CXA1315M, LINEAR	CXA1315M	
IC3508	72000388	IC, M52055FP, LINEAR	M52055FP	
IC3509	72000390	IC, 24LC04B, ROM	TVRJ475	
IC3511	72000391	IC, PIC16F876, ROM	TVRJ407	
IC3513	72000392	IC, TC74HCU04AF, CMOS, S/LOGIC	TC74HCU04AF	
IC3514	72000393	IC, TC7SH32F	TC7SH32F	
IC3515	72000394	IC, MAX202CSE	MAX202CSE	
IC400	72000395	IC, MIP0210SY1TV, LOGIC	MIP0210SY1TV	
IC401	72000396	IC, AN7715F, LINEAR	AN7715F	
IC403	72000397	IC, UPC2260V, LINEAR	UPC2260V	

Loc. No.	Part No.	Description	Reference No.	Remarks
IC406	72000398	IC, UPC1093J, LINEAR	UPC1093J	
IC407	72000399	IC, SI-8050S, HYBRID	SI-8050S	
IC410	72000398	IC, UPC1093J, LINEAR	UPC1093J	
IC411	72000400	IC, PQ30RV21A, LINEAR	PQ30RV21A	
IC412	72000401	IC, SI-8150S	C0DAAKH00004	
IC421	72000346	PHOTO COUPLER, PC123FY2	PC123FY2	⚠
IC600	72000402	IC, UC3715N	UC3715N	
IC601	72000403	IC, MC33025P	MC33025P	
IC602	72000402	IC, UC3715N	UC3715N	
IC635	72000398	IC, UPC1093J, LINEAR	UPC1093J	
IC650	72000404	IC, AN8026, LINEAR	AN8026	
IC735	72000405	IC, MC33262P	MC33262P	
IC736	72000406	IC, AN6912, LINEAR	AN6912	
IC737	72000407	IC, AN78L05, LINEAR	AN78L05	
IC750	72000406	IC, AN6912, LINEAR	AN6912	
IC751	72000408	PHOTO COUPLER, TLP621GR	TLP621GR	⚠
IC775	72000406	IC, AN6912, LINEAR	AN6912	
IC8001	72000409	IC, AD8055ART	AD8055ART	
IC8002	72000409	IC, AD8055ART	AD8055ART	
IC8003	72000409	IC, AD8055ART	AD8055ART	
IC8004	72000409	IC, AD8055ART	AD8055ART	
IC8005	72000410	IC, TC4W53F, CMOS, S/LOGIC	TC4W53F	
IC8006	72000411	IC, MM1065ZMR, LINEAR	MM1065ZMR	
IC8009	72000412	IC, CXA1211M, LINEAR	CXA1211M	
IC8010	72000413	IC, M52036SP, LINEAR	M52036SP	
IC8011	72000414	IC, TC74HC14AF	TC74HC14AF	
IC8012	72000415	IC, PST9128NR, LOGIC	PST9128NR	
IC8014	72000416	IC, M52065FP, LINEAR	M52065FP	
IC8015	72000412	IC, CXA1211M, LINEAR	CXA1211M	
IC8016	72000417	IC, TC74LCX244F, CMOS, S/LOGIC	TC74LCX244F	
IC8017	72000418	IC, TC74LCX74F, CMOS, S/LOGIC	TC74LCX74F	
IC8019	72000419	IC, PST9142NR, LOGIC	PST9142NR	
IC8020	72000420	IC, JLC1562BF, MOS, MICON LSI	JLC1562BF	
IC8021	72000421	IC, AN78L05M, LINEAR	AN78L05M	
IC8023	72000417	IC, TC74LCX244F, CMOS, S/LOGIC	TC74LCX244F	
IC8025	72000417	IC, TC74LCX244F, CMOS, S/LOGIC	TC74LCX244F	
IC8027	72000417	IC, TC74LCX244F, CMOS, S/LOGIC	TC74LCX244F	
IC8028	72000417	IC, TC74LCX244F, CMOS, S/LOGIC	TC74LCX244F	
IC8029	72000382	IC, PQ09SZ1T	PQ09SZ1T	
IC8030	72000924	IC, PQ12SZ1T	PQ12SZ1T	
IC8033	72000417	IC, TC74LCX244F, CMOS, S/LOGIC	TC74LCX244F	
IC921	72000404	IC, AN8026, LINEAR	AN8026	
IC931	72000398	IC, UPC1093J, LINEAR	UPC1093J	
IC932	72000423	IC, AN78M15, LINEAR	AN78M15	
IC934	72000398	IC, UPC1093J, LINEAR	UPC1093J	
IC981	72000424	IC, MD1421N	C0DBAHH00013	

Loc. No.	Part No.	Description	Reference No.	Remarks
JK3504	72000425	CONNECTOR	K1QBB5AB0003	
JK3505	72000426	JACK	K2HA202B0025	
JK3506	72000426	JACK	K2HA202B0025	
JK3507	72000427	CONNECTOR	K1QBB1AB0008	
JK3508	72000428	CONNECTOR	K1CB104B0031	
JK3509	72000429	CONNECTOR	K1FB109B0058	
JK3511	72000430	CONNECTOR	TJS8A9880	
JK3512	72000431	CONNECTOR	K1FB126B0014	
JK3513	72000925	JACK	K2HC103B0105	
JK8500	72000433	TERMINAL	K4BC02B00013	
L2301	72000926	LC FILTER, ELC10E680	ELC10E680	
L2302	72000926	LC FILTER, ELC10E680	ELC10E680	
L2303	72000434	BEAD CHOKE, EXCELDR35C	EXCELDR35C	
L2304	72000434	BEAD CHOKE, EXCELDR35C	EXCELDR35C	
L2306	72000435	CHIP INDUCTOR, ELJPA100KB	ELJPA100KB	
L3501	72000436	EMI FILTER, TLK20LFA224M	TLK20LFA224M	
L3503	72000437	EMI FILTER, TLK212T256AL	TLK212T256AL	
L3504	72000437	EMI FILTER, TLK212T256AL	TLK212T256AL	
L3505	72000437	EMI FILTER, TLK212T256AL	TLK212T256AL	
L3506	72000437	EMI FILTER, TLK212T256AL	TLK212T256AL	
L3507	72000436	EMI FILTER, TLK20LFA224M	TLK20LFA224M	
L3508	72000436	EMI FILTER, TLK20LFA224M	TLK20LFA224M	
L3509	72000436	EMI FILTER, TLK20LFA224M	TLK20LFA224M	
L3510	72000437	EMI FILTER, TLK212T256AL	TLK212T256AL	
L3511	72000437	EMI FILTER, TLK212T256AL	TLK212T256AL	
L3512	72000437	EMI FILTER, TLK212T256AL	TLK212T256AL	
L3513	72000437	EMI FILTER, TLK212T256AL	TLK212T256AL	
L3516	72000436	EMI FILTER, TLK20LFA224M	TLK20LFA224M	
L3517	72000436	EMI FILTER, TLK20LFA224M	TLK20LFA224M	
L3518	72000436	EMI FILTER, TLK20LFA224M	TLK20LFA224M	
L3519	72000437	EMI FILTER, TLK212T256AL	TLK212T256AL	
L3520	72000437	EMI FILTER, TLK212T256AL	TLK212T256AL	
L3521	72000437	EMI FILTER, TLK212T256AL	TLK212T256AL	
L3522	72000435	CHIP INDUCTOR, ELJPA100KB	ELJPA100KB	
L3524	72000435	CHIP INDUCTOR, ELJPA100KB	ELJPA100KB	
L3525	72000435	CHIP INDUCTOR, ELJPA100KB	ELJPA100KB	
L3526	72000435	CHIP INDUCTOR, ELJPA100KB	ELJPA100KB	
L3527	72000435	CHIP INDUCTOR, ELJPA100KB	ELJPA100KB	
L3529	72000435	CHIP INDUCTOR, ELJPA100KB	ELJPA100KB	
L3530	72000435	CHIP INDUCTOR, ELJPA100KB	ELJPA100KB	
L3531	72000435	CHIP INDUCTOR, ELJPA100KB	ELJPA100KB	
L3532	72000435	CHIP INDUCTOR, ELJPA100KB	ELJPA100KB	
L3533	72000435	CHIP INDUCTOR, ELJPA100KB	ELJPA100KB	
L3534	72000435	CHIP INDUCTOR, ELJPA100KB	ELJPA100KB	
L3535	72000435	CHIP INDUCTOR, ELJPA100KB	ELJPA100KB	
L3536	72000435	CHIP INDUCTOR, ELJPA100KB	ELJPA100KB	
L401	72000438	CHOKE COIL, TLPF102	TLPF102	⚠
L402	72000438	CHOKE COIL, TLPF102	TLPF102	⚠
L407	72000439	PEAKING COIL, ELEXH100KA	ELEXH100KA	
L411	72000440	COIL, G0ZZ00001986	G0ZZ00001986	
L412	72000441	CHOKE COIL, TLPF075	TLPF075	
L423	72000442	BEAD CHOKE, EXCELSA39	EXCELSA39	
L424	72000442	BEAD CHOKE, EXCELSA39	EXCELSA39	
L426	72000442	BEAD CHOKE, EXCELSA39	EXCELSA39	
L428	72000441	CHOKE COIL, TLPF075	TLPF075	
L430	72000442	BEAD CHOKE, EXCELSA39	EXCELSA39	
L431	72000443	BEAD CHOKE, EXCELDR25C	EXCELDR25C	
L433	72000444	C 0 OHM, 1/4W, ERD25V0R00	ERD25V0R00	
L434	72000445	COIL, G0ZZ00001987	G0ZZ00001987	
L435	72000443	BEAD CHOKE, EXCELDR25C	EXCELDR25C	
L8001	72000435	CHIP INDUCTOR, ELJPA100KB	ELJPA100KB	
L8002	72000435	CHIP INDUCTOR, ELJPA100KB	ELJPA100KB	
L8003	72000435	CHIP INDUCTOR, ELJPA100KB	ELJPA100KB	
L8008	72000435	CHIP INDUCTOR, ELJPA100KB	ELJPA100KB	
L8010	72000435	CHIP INDUCTOR, ELJPA100KB	ELJPA100KB	
L8011	72000435	CHIP INDUCTOR, ELJPA100KB	ELJPA100KB	
L8013	72000749	CHIP INDUCTOR, ELJPA150KB	ELJPA150KB	
L8014	72000435	CHIP INDUCTOR, ELJPA100KB	ELJPA100KB	
L8016	72000435	CHIP INDUCTOR, ELJPA100KB	ELJPA100KB	
L8017	72000435	CHIP INDUCTOR, ELJPA100KB	ELJPA100KB	
L8018	72000435	CHIP INDUCTOR, ELJPA100KB	ELJPA100KB	
L8020	72000435	CHIP INDUCTOR, ELJPA100KB	ELJPA100KB	
L8022	72000435	CHIP INDUCTOR, ELJPA100KB	ELJPA100KB	
L8023	72000435	CHIP INDUCTOR, ELJPA100KB	ELJPA100KB	
L8025	72000435	CHIP INDUCTOR, ELJPA100KB	ELJPA100KB	
L8026	72000435	CHIP INDUCTOR, ELJPA100KB	ELJPA100KB	
L8028	72000435	CHIP INDUCTOR, ELJPA100KB	ELJPA100KB	
L8029	72000435	CHIP INDUCTOR, ELJPA100KB	ELJPA100KB	
L8501	72000446	LINE FILTER, TLPD061	TLPD061	
L8502	72000446	LINE FILTER, TLPD061	TLPD061	
L901	72000447	CHOKE COIL, G0A101L00002	G0A101L00002	⚠
L902	72000448	CHOKE COIL, G0BYYYL00001	G0BYYYL00001	⚠
L903	72000448	CHOKE COIL, G0BYYYL00001	G0BYYYL00001	⚠
L981	72000449	LC FILTER, ELC10D180	ELC10D180	
LC8001	72000450	FILTER, TAX10079	TAX10079	
LC8002	72000450	FILTER, TAX10079	TAX10079	

Loc. No.	Part No.	Description	Reference No.	Remarks
LC8003	72000450	FILTER, TAX10079	TAX10079	
LF400	72000451	LINE FILTER, ELF11M010E	ELF11M010E	⚠
Q082	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q2301	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q2302	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q2303	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q2304	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q2305	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q2306	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q2401	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q2402	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q2403	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q2404	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q2405	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q2406	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q3501	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q3503	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q3504	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q3505	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q3506	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q3507	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q3508	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q3509	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q3510	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q3511	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q3512	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q3513	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q3514	72000453	TRANSISTOR, 2SB709A	2SB709A	
Q3515	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q3516	72000453	TRANSISTOR, 2SB709A	2SB709A	
Q3517	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q3518	72000453	TRANSISTOR, 2SB709A	2SB709A	
Q3519	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q3520	72000453	TRANSISTOR, 2SB709A	2SB709A	
Q3521	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q3522	72000453	TRANSISTOR, 2SB709A	2SB709A	
Q3523	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q3524	72000453	TRANSISTOR, 2SB709A	2SB709A	
Q3525	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q3526	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q3527	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q3528	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q3529	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q3530	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q3531	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q3532	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q3533	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q3534	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q3535	72000453	TRANSISTOR, 2SB709A	2SB709A	
Q3536	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q400	72000454	TRANSISTOR, 2SB1438	2SB1438	
Q401	72000454	TRANSISTOR, 2SB1438	2SB1438	
Q402	72000455	TRANSISTOR, 2SK1917, FET	2SK1917	
Q403	72000455	TRANSISTOR, 2SK1917, FET	2SK1917	
Q404	72000456	TRANSISTOR, 2SK3318000LB, FET	2SK3318000LB	
Q405	72000456	TRANSISTOR, 2SK3318000LB, FET	2SK3318000LB	
Q406	72000457	TRANSISTOR, 2SC1384	2SC1384	
Q407	72000458	TRANSISTOR, 2SA684	2SA684	
Q408	72000457	TRANSISTOR, 2SC1384	2SC1384	
Q409	72000458	TRANSISTOR, 2SA684	2SA684	
Q410	72000457	TRANSISTOR, 2SC1384	2SC1384	
Q411	72000457	TRANSISTOR, 2SC1384	2SC1384	
Q412	72000927	TRANSISTOR, 2SK2197, FET	2SK2197	
Q413	72000927	TRANSISTOR, 2SK2197, FET	2SK2197	
Q414	72000927	TRANSISTOR, 2SK2197, FET	2SK2197	
Q415	72000927	TRANSISTOR, 2SK2197, FET	2SK2197	
Q416	72000459	TRANSISTOR, 2SK2847, FET	2SK2847	
Q417	72000460	TRANSISTOR, 2SC3311A	2SC3311A	
Q418	72000460	TRANSISTOR, 2SC3311A	2SC3311A	
Q419	72000461	TRANSISTOR, 2SD2177R	2SD2177R	
Q421	72000462	TRANSISTOR, 2SA1309A	2SA1309A	
Q423	72000456	TRANSISTOR, 2SK3318000LB, FET	2SK3318000LB	
Q424	72000456	TRANSISTOR, 2SK3318000LB, FET	2SK3318000LB	
Q425	72000461	TRANSISTOR, 2SD2177R	2SD2177R	
Q426	72000927	TRANSISTOR, 2SK2197, FET	2SK2197	
Q427	72000460	TRANSISTOR, 2SC3311A	2SC3311A	
Q428	72000460	TRANSISTOR, 2SC3311A	2SC3311A	
Q429	72000460	TRANSISTOR, 2SC3311A	2SC3311A	
Q430	72000463	TRANSISTOR, 2SB621A	2SB621A	
Q431	72000460	TRANSISTOR, 2SC3311A	2SC3311A	
Q432	72000462	TRANSISTOR, 2SA1309A	2SA1309A	

Loc. No.	Part No.	Description	Reference No.	Remarks
Q434	72000464	TRANSISTOR, 2SB940	2SB940	
Q436	72000465	TRANSISTOR, 2SC1473A	2SC1473A	
Q600	72000460	TRANSISTOR, 2SC3311A	2SC3311A	
Q601	72000462	TRANSISTOR, 2SA1309A	2SA1309A	
Q602	72000460	TRANSISTOR, 2SC3311A	2SC3311A	
Q635	72000465	TRANSISTOR, 2SC1473A	2SC1473A	
Q636	72000460	TRANSISTOR, 2SC3311A	2SC3311A	
Q650	72000460	TRANSISTOR, 2SC3311A	2SC3311A	
Q651	72000460	TRANSISTOR, 2SC3311A	2SC3311A	
Q730	72000466	TRANSISTOR, 2SB1030A	2SB1030A	
Q750	72000460	TRANSISTOR, 2SC3311A	2SC3311A	
Q751	72000462	TRANSISTOR, 2SA1309A	2SA1309A	
Q775	72000460	TRANSISTOR, 2SC3311A	2SC3311A	
Q776	72000462	TRANSISTOR, 2SA1309A	2SA1309A	
Q8001	72000453	TRANSISTOR, 2SB709A	2SB709A	
Q8002	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q8003	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q8004	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q8005	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q8006	72000453	TRANSISTOR, 2SB709A	2SB709A	
Q8007	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q8008	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q8009	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q8010	72000453	TRANSISTOR, 2SB709A	2SB709A	
Q8012	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q8013	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q8014	72000453	TRANSISTOR, 2SB709A	2SB709A	
Q8015	72000453	TRANSISTOR, 2SB709A	2SB709A	
Q8016	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q8018	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q8019	72000453	TRANSISTOR, 2SB709A	2SB709A	
Q8020	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q8021	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q8022	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q8030	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q8031	72000453	TRANSISTOR, 2SB709A	2SB709A	
Q8032	72000453	TRANSISTOR, 2SB709A	2SB709A	
Q8033	72000452	TRANSISTOR, 2SD601A	2SD601A	
Q921	72000459	TRANSISTOR, 2SK2847, FET	2SK2847	
Q922	72000467	TRANSISTOR, 2SK2475, FET	2SK2475	

Loc. No.	Part No.	Description	Reference No.	Remarks
Q926	72000468	TRANSISTOR, 2SD1264	2SD1264	
Q927	72000465	TRANSISTOR, 2SC1473A	2SC1473A	
Q932	72000463	TRANSISTOR, 2SB621A	2SB621A	
Q933	72000460	TRANSISTOR, 2SC3311A	2SC3311A	
R081	72000469	RESISTOR, M 47 OHM,J,1/10W	ERJ6GEYJ470	
R082	72000470	RESISTOR, M 220KOHM,J,1/10W	ERJ6GEYJ224	
R083	72000471	RESISTOR, M 470 OHM,J,1/10W	ERJ6GEYJ471	
R084	72000472	RESISTOR, M 270 OHM,J,1/10W	ERJ6GEYJ271	
R087	72000473	RESISTOR, M 0 OHM,J,1/10W	ERJ6GEY0R00	
R088	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R1554	72000475	RESISTOR, M 2.2KOHM,J,1/10W	ERJ6GEYJ222	
R1555	72000475	RESISTOR, M 2.2KOHM,J,1/10W	ERJ6GEYJ222	
R2301	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R2304	72000477	RESISTOR, M 47KOHM,J,1/10W	ERJ6GEYJ473	
R2305	72000478	RESISTOR, M 22KOHM,J,1/10W	ERJ6GEYJ223	
R2306	72000478	RESISTOR, M 22KOHM,J,1/10W	ERJ6GEYJ223	
R2307	72000479	RESISTOR, M 68KOHM,J,1/10W	ERJ6GEYJ683	
R2308	72000477	RESISTOR, M 47KOHM,J,1/10W	ERJ6GEYJ473	
R2309	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R2310	72000480	RESISTOR, M 5.6KOHM,J,1/10W	ERJ6GEYJ562	
R2319	72000481	RESISTOR, M 560 OHM,J,1/10W	ERJ6GEYJ561	
R2320	72000481	RESISTOR, M 560 OHM,J,1/10W	ERJ6GEYJ561	
R2321	72000473	RESISTOR, M 0 OHM,J,1/10W	ERJ6GEY0R00	
R2322	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R2323	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R2324	72000481	RESISTOR, M 560 OHM,J,1/10W	ERJ6GEYJ561	
R2325	72000481	RESISTOR, M 560 OHM,J,1/10W	ERJ6GEYJ561	
R2326	72000482	RESISTOR, M 12KOHM,J,1/10W	ERJ6GEYJ123	
R2327	72000483	RESISTOR, M 7.5KOHM,J,1/10W	ERJ6GEYJ752	
R2328	72000479	RESISTOR, M 68KOHM,J,1/10W	ERJ6GEYJ683	
R2329	72000484	RESISTOR, M 3.3KOHM,J,1/10W	ERJ6GEYJ332	
R2330	72000484	RESISTOR, M 3.3KOHM,J,1/10W	ERJ6GEYJ332	
R2331	72000473	RESISTOR, M 0 OHM,J,1/10W	ERJ6GEY0R00	
R2332	72000485	RESISTOR, M 1.8KOHM,J,1/10W	ERJ6GEYJ182	
R2333	72000471	RESISTOR, M 470 OHM,J,1/10W	ERJ6GEYJ471	
R2334	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R2335	72000482	RESISTOR, M 12KOHM,J,1/10W	ERJ6GEYJ123	
R2336	72000482	RESISTOR, M 12KOHM,J,1/10W	ERJ6GEYJ123	
R2341	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R2342	72000473	RESISTOR, M 0 OHM,J,1/10W	ERJ6GEY0R00	

Loc. No.	Part No.	Description	Reference No.	Remarks
R2343	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R2344	72000473	RESISTOR, M 0 OHM,J,1/10W	ERJ6GEY0R00	
R2345	72000471	RESISTOR, M 470 OHM,J,1/10W	ERJ6GEYJ471	
R2346	72000482	RESISTOR, M 12KOHM,J,1/10W	ERJ6GEYJ123	
R2347	72000477	RESISTOR, M 47KOHM,J,1/10W	ERJ6GEYJ473	
R2348	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R2405	72000478	RESISTOR, M 22KOHM,J,1/10W	ERJ6GEYJ223	
R2408	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R2410	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R2411	72000487	RESISTOR, M 39KOHM,J,1/10W	ERJ6GEYJ393	
R2412	72000478	RESISTOR, M 22KOHM,J,1/10W	ERJ6GEYJ223	
R2416	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R2417	72000488	RESISTOR, M 24KOHM,J,1/10W	ERJ6GEYJ243	
R2418	72000489	RESISTOR, M 150KOHM,J,1/10W	ERJ6GEYJ154	
R2419	72000489	RESISTOR, M 150KOHM,J,1/10W	ERJ6GEYJ154	
R2420	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R2421	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R2422	72000475	RESISTOR, M 2.2KOHM,J,1/10W	ERJ6GEYJ222	
R2423	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R2424	72000490	RESISTOR, M 100KOHM,J,1/10W	ERJ6GEYJ104	
R2425	72000478	RESISTOR, M 22KOHM,J,1/10W	ERJ6GEYJ223	
R2426	72000491	RESISTOR, M 75KOHM,J,1/10W	ERJ6GEYJ753	
R2427	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R2428	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R2429	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R2430	72000477	RESISTOR, M 47KOHM,J,1/10W	ERJ6GEYJ473	
R2431	72000482	RESISTOR, M 12KOHM,J,1/10W	ERJ6GEYJ123	
R2432	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R2433	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R2434	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R2435	72000479	RESISTOR, M 68KOHM,J,1/10W	ERJ6GEYJ683	
R2436	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R2437	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R2439	72000492	RESISTOR, M 56KOHM,J,1/10W	ERJ6GEYJ563	
R2440	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R2441	72000493	RESISTOR, M 33KOHM,J,1/10W	ERJ6GEYJ333	
R2443	72000492	RESISTOR, M 56KOHM,J,1/10W	ERJ6GEYJ563	
R2444	72000490	RESISTOR, M 100KOHM,J,1/10W	ERJ6GEYJ104	
R2445	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R2446	72000490	RESISTOR, M 100KOHM,J,1/10W	ERJ6GEYJ104	

Loc. No.	Part No.	Description	Reference No.	Remarks
R2448	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R2450	72000492	RESISTOR, M 56KOHM,J,1/10W	ERJ6GEYJ563	
R2452	72000477	RESISTOR, M 47KOHM,J,1/10W	ERJ6GEYJ473	
R2453	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R2456	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R2460	72000494	RESISTOR, M 18KOHM, 1/10W	ERJ6ENF1802	
R2461	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R2462	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R2463	72000496	RESISTOR, M 15KOHM, 1/10W	ERJ6ENF1502	
R2466	72000490	RESISTOR, M 100KOHM,J,1/10W	ERJ6GEYJ104	
R2467	72000470	RESISTOR, M 220KOHM,J,1/10W	ERJ6GEYJ224	
R2468	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R2469	72000475	RESISTOR, M 2.2KOHM,J,1/10W	ERJ6GEYJ222	
R2470	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R2471	72000485	RESISTOR, M 1.8KOHM,J,1/10W	ERJ6GEYJ182	
R2472	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R2473	72000485	RESISTOR, M 1.8KOHM,J,1/10W	ERJ6GEYJ182	
R2476	72000497	RESISTOR, M 22 OHM,J,1/10W	ERJ6GEYJ220	
R2477	72000497	RESISTOR, M 22 OHM,J,1/10W	ERJ6GEYJ220	
R3501	72000498	RESISTOR, M 180KOHM,J,1/10W	ERJ6GEYJ184	
R3502	72000498	RESISTOR, M 180KOHM,J,1/10W	ERJ6GEYJ184	
R3503	72000499	RESISTOR, M 75 OHM, 1/10W	ERJ6ENF75R0	
R3504	72000499	RESISTOR, M 75 OHM, 1/10W	ERJ6ENF75R0	
R3505	72000499	RESISTOR, M 75 OHM, 1/10W	ERJ6ENF75R0	
R3506	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R3507	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R3508	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R3509	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R3510	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3511	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3512	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3513	72000498	RESISTOR, M 180KOHM,J,1/10W	ERJ6GEYJ184	
R3514	72000498	RESISTOR, M 180KOHM,J,1/10W	ERJ6GEYJ184	
R3515	72000500	RESISTOR, M 56 OHM,J,1/10W	ERJ6GEYJ560	
R3516	72000500	RESISTOR, M 56 OHM,J,1/10W	ERJ6GEYJ560	
R3517	72000500	RESISTOR, M 56 OHM,J,1/10W	ERJ6GEYJ560	
R3518	72000500	RESISTOR, M 56 OHM,J,1/10W	ERJ6GEYJ560	
R3520	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3521	72000498	RESISTOR, M 180KOHM,J,1/10W	ERJ6GEYJ184	
R3522	72000498	RESISTOR, M 180KOHM,J,1/10W	ERJ6GEYJ184	

Loc. No.	Part No.	Description	Reference No.	Remarks
R3523	72000499	RESISTOR, M 75 OHM, 1/10W	ERJ6ENF75R0	
R3524	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R3525	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R3526	72000499	RESISTOR, M 75 OHM, 1/10W	ERJ6ENF75R0	
R3527	72000499	RESISTOR, M 75 OHM, 1/10W	ERJ6ENF75R0	
R3528	72000499	RESISTOR, M 75 OHM, 1/10W	ERJ6ENF75R0	
R3529	72000498	RESISTOR, M 180KOHM,J,1/10W	ERJ6GEYJ184	
R3530	72000498	RESISTOR, M 180KOHM,J,1/10W	ERJ6GEYJ184	
R3531	72000499	RESISTOR, M 75 OHM, 1/10W	ERJ6ENF75R0	
R3532	72000499	RESISTOR, M 75 OHM, 1/10W	ERJ6ENF75R0	
R3533	72000499	RESISTOR, M 75 OHM, 1/10W	ERJ6ENF75R0	
R3534	72000490	RESISTOR, M 100KOHM,J,1/10W	ERJ6GEYJ104	
R3535	72000499	RESISTOR, M 75 OHM, 1/10W	ERJ6ENF75R0	
R3536	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R3537	72000473	RESISTOR, M 0 OHM,J,1/10W	ERJ6GEY0R00	
R3538	72000473	RESISTOR, M 0 OHM,J,1/10W	ERJ6GEY0R00	
R3539	72000930	RESISTOR, M 15KOHM,J,1/10W	ERJ6GEYJ153	
R3540	72000493	RESISTOR, M 33KOHM,J,1/10W	ERJ6GEYJ333	
R3543	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3544	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3545	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3546	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3547	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3548	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3549	72000930	RESISTOR, M 15KOHM,J,1/10W	ERJ6GEYJ153	
R3550	72000493	RESISTOR, M 33KOHM,J,1/10W	ERJ6GEYJ333	
R3551	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R3553	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3555	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R3556	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3557	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3558	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R3559	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3560	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R3561	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3562	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3563	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R3564	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3565	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R3566	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	

Loc. No.	Part No.	Description	Reference No.	Remarks
R3567	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R3568	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3569	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R3570	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3571	72000930	RESISTOR, M 15KOHM,J,1/10W	ERJ6GEYJ153	
R3572	72000493	RESISTOR, M 33KOHM,J,1/10W	ERJ6GEYJ333	
R3573	72000930	RESISTOR, M 15KOHM,J,1/10W	ERJ6GEYJ153	
R3574	72000493	RESISTOR, M 33KOHM,J,1/10W	ERJ6GEYJ333	
R3575	72000930	RESISTOR, M 15KOHM,J,1/10W	ERJ6GEYJ153	
R3576	72000493	RESISTOR, M 33KOHM,J,1/10W	ERJ6GEYJ333	
R3577	72000930	RESISTOR, M 15KOHM,J,1/10W	ERJ6GEYJ153	
R3578	72000493	RESISTOR, M 33KOHM,J,1/10W	ERJ6GEYJ333	
R3579	72000930	RESISTOR, M 15KOHM,J,1/10W	ERJ6GEYJ153	
R3580	72000493	RESISTOR, M 33KOHM,J,1/10W	ERJ6GEYJ333	
R3581	72000930	RESISTOR, M 15KOHM,J,1/10W	ERJ6GEYJ153	
R3582	72000493	RESISTOR, M 33KOHM,J,1/10W	ERJ6GEYJ333	
R3583	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R3584	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R3585	72000500	RESISTOR, M 56 OHM,J,1/10W	ERJ6GEYJ560	
R3586	72000500	RESISTOR, M 56 OHM,J,1/10W	ERJ6GEYJ560	
R3587	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3589	72000477	RESISTOR, M 47KOHM,J,1/10W	ERJ6GEYJ473	
R3590	72000500	RESISTOR, M 56 OHM,J,1/10W	ERJ6GEYJ560	
R3592	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R3593	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R3594	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R3595	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R3596	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R3597	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R3599	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3600	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3601	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3602	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3603	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3604	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3605	72000930	RESISTOR, M 15KOHM,J,1/10W	ERJ6GEYJ153	
R3606	72000493	RESISTOR, M 33KOHM,J,1/10W	ERJ6GEYJ333	
R3607	72000930	RESISTOR, M 15KOHM,J,1/10W	ERJ6GEYJ153	
R3608	72000493	RESISTOR, M 33KOHM,J,1/10W	ERJ6GEYJ333	
R3609	72000930	RESISTOR, M 15KOHM,J,1/10W	ERJ6GEYJ153	

Loc. No.	Part No.	Description	Reference No.	Remarks
R3610	72000493	RESISTOR, M 33KOHM,J,1/10W	ERJ6GEYJ333	
R3611	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R3612	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R3613	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R3614	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R3615	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R3616	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R3617	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R3618	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R3619	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R3620	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R3621	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R3622	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R3623	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R3624	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R3625	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R3626	72000929	RESISTOR, M 3.3KOHM,J,1/10W	ERJ6GEYJ3R3	
R3627	72000929	RESISTOR, M 3.3KOHM,J,1/10W	ERJ6GEYJ3R3	
R3628	72000929	RESISTOR, M 3.3KOHM,J,1/10W	ERJ6GEYJ3R3	
R3629	72000929	RESISTOR, M 3.3KOHM,J,1/10W	ERJ6GEYJ3R3	
R3630	72000929	RESISTOR, M 3.3KOHM,J,1/10W	ERJ6GEYJ3R3	
R3631	72000929	RESISTOR, M 3.3KOHM,J,1/10W	ERJ6GEYJ3R3	
R3632	72000929	RESISTOR, M 3.3KOHM,J,1/10W	ERJ6GEYJ3R3	
R3633	72000929	RESISTOR, M 3.3KOHM,J,1/10W	ERJ6GEYJ3R3	
R3634	72000929	RESISTOR, M 3.3KOHM,J,1/10W	ERJ6GEYJ3R3	
R3635	72000929	RESISTOR, M 3.3KOHM,J,1/10W	ERJ6GEYJ3R3	
R3636	72000929	RESISTOR, M 3.3KOHM,J,1/10W	ERJ6GEYJ3R3	
R3637	72000929	RESISTOR, M 3.3KOHM,J,1/10W	ERJ6GEYJ3R3	
R3638	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3639	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3640	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3641	72000930	RESISTOR, M 15KOHM,J,1/10W	ERJ6GEYJ153	
R3642	72000493	RESISTOR, M 33KOHM,J,1/10W	ERJ6GEYJ333	
R3643	72000930	RESISTOR, M 15KOHM,J,1/10W	ERJ6GEYJ153	
R3644	72000493	RESISTOR, M 33KOHM,J,1/10W	ERJ6GEYJ333	
R3645	72000930	RESISTOR, M 15KOHM,J,1/10W	ERJ6GEYJ153	
R3646	72000493	RESISTOR, M 33KOHM,J,1/10W	ERJ6GEYJ333	
R3647	72000930	RESISTOR, M 15KOHM,J,1/10W	ERJ6GEYJ153	
R3648	72000493	RESISTOR, M 33KOHM,J,1/10W	ERJ6GEYJ333	
R3649	72000930	RESISTOR, M 15KOHM,J,1/10W	ERJ6GEYJ153	
R3650	72000493	RESISTOR, M 33KOHM,J,1/10W	ERJ6GEYJ333	
R3651	72000930	RESISTOR, M 15KOHM,J,1/10W	ERJ6GEYJ153	
R3652	72000493	RESISTOR, M 33KOHM,J,1/10W	ERJ6GEYJ333	
R3653	72000930	RESISTOR, M 15KOHM,J,1/10W	ERJ6GEYJ153	
R3654	72000493	RESISTOR, M 33KOHM,J,1/10W	ERJ6GEYJ333	
R3655	72000930	RESISTOR, M 15KOHM,J,1/10W	ERJ6GEYJ153	
R3656	72000493	RESISTOR, M 33KOHM,J,1/10W	ERJ6GEYJ333	
R3657	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R3658	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R3659	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R3660	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R3661	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R3662	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R3663	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R3664	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R3665	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3666	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3667	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3668	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3669	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3670	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3671	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3672	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3673	72000480	RESISTOR, M 5.6KOHM,J,1/10W	ERJ6GEYJ562	
R3674	72000480	RESISTOR, M 5.6KOHM,J,1/10W	ERJ6GEYJ562	
R3675	72000480	RESISTOR, M 5.6KOHM,J,1/10W	ERJ6GEYJ562	
R3676	72000481	RESISTOR, M 560 OHM,J,1/10W	ERJ6GEYJ561	
R3677	72000481	RESISTOR, M 560 OHM,J,1/10W	ERJ6GEYJ561	
R3678	72000481	RESISTOR, M 560 OHM,J,1/10W	ERJ6GEYJ561	
R3679	72000503	RESISTOR, M 330 OHM,J,1/10W	ERJ6GEYJ331	
R3681	72000503	RESISTOR, M 330 OHM,J,1/10W	ERJ6GEYJ331	
R3682	72000503	RESISTOR, M 330 OHM,J,1/10W	ERJ6GEYJ331	
R3683	72000503	RESISTOR, M 330 OHM,J,1/10W	ERJ6GEYJ331	
R3684	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R3686	72000480	RESISTOR, M 5.6KOHM,J,1/10W	ERJ6GEYJ562	
R3687	72000480	RESISTOR, M 5.6KOHM,J,1/10W	ERJ6GEYJ562	
R3688	72000504	RESISTOR, M 220 OHM,J,1/10W	ERJ6GEYJ221	
R3689	72000504	RESISTOR, M 220 OHM,J,1/10W	ERJ6GEYJ221	
R3690	72000504	RESISTOR, M 220 OHM,J,1/10W	ERJ6GEYJ221	
R3691	72000504	RESISTOR, M 220 OHM,J,1/10W	ERJ6GEYJ221	

Loc. No.	Part No.	Description	Reference No.	Remarks
R3695	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R3696	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R3697	72000930	RESISTOR, M 15KOHM,J,1/10W	ERJ6GEYJ153	
R3698	72000493	RESISTOR, M 33KOHM,J,1/10W	ERJ6GEYJ333	
R3699	72000930	RESISTOR, M 15KOHM,J,1/10W	ERJ6GEYJ153	
R3700	72000493	RESISTOR, M 33KOHM,J,1/10W	ERJ6GEYJ333	
R3701	72000500	RESISTOR, M 56 OHM,J,1/10W	ERJ6GEYJ560	
R3702	72000500	RESISTOR, M 56 OHM,J,1/10W	ERJ6GEYJ560	
R3703	72000504	RESISTOR, M 220 OHM,J,1/10W	ERJ6GEYJ221	
R3704	72000480	RESISTOR, M 5.6KOHM,J,1/10W	ERJ6GEYJ562	
R3705	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R3706	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R3707	72000504	RESISTOR, M 220 OHM,J,1/10W	ERJ6GEYJ221	
R3708	72000481	RESISTOR, M 560 OHM,J,1/10W	ERJ6GEYJ561	
R3709	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3710	72000481	RESISTOR, M 560 OHM,J,1/10W	ERJ6GEYJ561	
R3711	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3712	72000481	RESISTOR, M 560 OHM,J,1/10W	ERJ6GEYJ561	
R3713	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3714	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3715	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3716	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3717	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3725	72000500	RESISTOR, M 56 OHM,J,1/10W	ERJ6GEYJ560	
R3726	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3727	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3728	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3730	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R3731	72000477	RESISTOR, M 47KOHM,J,1/10W	ERJ6GEYJ473	
R3732	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R3733	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R3734	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R3735	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R3736	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R3737	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R3738	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R3739	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R3740	72000473	RESISTOR, M 0 OHM,J,1/10W	ERJ6GEY0R00	
R3742	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R3743	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	

Loc. No.	Part No.	Description	Reference No.	Remarks
R3744	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R3745	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R3746	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R3747	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R3748	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R3750	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R3751	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R3752	72000505	RESISTOR, M 1MOHM,J,1/16W	ERJ3GEYJ105	
R3753	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3754	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3755	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3756	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3757	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3758	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3759	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3761	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3762	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3763	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3764	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3765	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3766	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3767	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3768	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3769	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3770	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3771	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3772	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3773	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3774	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3775	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3776	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3777	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R3778	72000477	RESISTOR, M 47KOHM,J,1/10W	ERJ6GEYJ473	
R3779	72000473	RESISTOR, M 0 OHM,J,1/10W	ERJ6GEY0R00	
R3780	72000473	RESISTOR, M 0 OHM,J,1/10W	ERJ6GEY0R00	
R3781	72000473	RESISTOR, M 0 OHM,J,1/10W	ERJ6GEY0R00	
R400	72000506	RESISTOR, F 6.8 OHM, J, 7W	TARAFR06R8JC	
R401	72000506	RESISTOR, F 6.8 OHM, J, 7W	TARAFR06R8JC	
R402	72000506	RESISTOR, F 6.8 OHM, J, 7W	TARAFR06R8JC	
R403	72000506	RESISTOR, F 6.8 OHM, J, 7W	TARAFR06R8JC	

Loc. No.	Part No.	Description	Reference No.	Remarks
R404	72000506	RESISTOR, F 6.8 OHM, J, 7W	TARAFR06R8JC	
R405	72000506	RESISTOR, F 6.8 OHM, J, 7W	TARAFR06R8JC	
R406	72000507	RESISTOR, C 820KOHM, J,1/2W	ERDS1FJ824	
R407	72000507	RESISTOR, C 820KOHM, J,1/2W	ERDS1FJ824	
R408	72000508	RESISTOR, M 182KOHM, F,1/4W	ER0S2CKF1823	
R409	72000509	RESISTOR, M 150KOHM, F,1/4W	ER0S2CKF1503	
R410	72000510	RESISTOR, M 33KOHM, J, 3W	ERG3FJS333D	
R411	72000511	RESISTOR, C 10KOHM, J,1/2W	ERDS1FJ103	
R412	72000511	RESISTOR, C 10KOHM, J,1/2W	ERDS1FJ103	
R413	72000512	RESISTOR, M 22 OHM, J, 1W	ERG1FJS220D	
R414	72000513	RESISTOR, C 10 OHM, J,1/2W	ERDS1FJ100	
R415	72000513	RESISTOR, C 10 OHM, J,1/2W	ERDS1FJ100	
R416	72000514	RESISTOR, M 82 OHM, J, 2W	ERG2FJS820D	
R417	72000515	RESISTOR, C 220 OHM, J,1/2W	ERDS1FJ221	
R419	72000511	RESISTOR, C 10KOHM, J,1/2W	ERDS1FJ103	
R420	72000511	RESISTOR, C 10KOHM, J,1/2W	ERDS1FJ103	
R421	72000513	RESISTOR, C 10 OHM, J,1/2W	ERDS1FJ100	
R422	72000513	RESISTOR, C 10 OHM, J,1/2W	ERDS1FJ100	
R423	72000511	RESISTOR, C 10KOHM, J,1/2W	ERDS1FJ103	
R424	72000511	RESISTOR, C 10KOHM, J,1/2W	ERDS1FJ103	
R425	72000516	RESISTOR, W 0.1 OHM, 5W	ERF5EKR10	
R426	72000517	RESISTOR, W0.15 OHM, 5W	ERF5EKR15	
R427	72000518	RESISTOR, M 470 OHM, J, 3W	ERG3FJS471D	
R428	72000518	RESISTOR, M 470 OHM, J, 3W	ERG3FJS471D	
R429	72000508	RESISTOR, M 182KOHM, F,1/4W	ER0S2CKF1823	
R430	72000519	RESISTOR, M 162KOHM, F,1/4W	ER0S2CKF1623	
R432	72000510	RESISTOR, M 33KOHM, J, 3W	ERG3FJS333D	
R433	72000520	RESISTOR, C 4.7KOHM, J,1/2W	ERDS1FJ472	
R434	72000521	RESISTOR, C 100 OHM, J,1/2W	ERDS1FJ101	
R435	72000521	RESISTOR, C 100 OHM, J,1/2W	ERDS1FJ101	
R436	72000522	RESISTOR, C 22 OHM, J,1/2W	ERDS1FJ220	
R437	72000522	RESISTOR, C 22 OHM, J,1/2W	ERDS1FJ220	
R438	72000508	RESISTOR, M 182KOHM, F,1/4W	ER0S2CKF1823	
R439	72000519	RESISTOR, M 162KOHM, F,1/4W	ER0S2CKF1623	
R440	72000523	RESISTOR, M0.47 OHM, J, 3W	ERX3FJSR47D	
R441	72000524	RESISTOR, C 2.2KOHM, J,1/2W	ERDS1FJ222	
R442	72000524	RESISTOR, C 2.2KOHM, J,1/2W	ERDS1FJ222	
R443	72000513	RESISTOR, C 10 OHM, J,1/2W	ERDS1FJ100	
R444	72000513	RESISTOR, C 10 OHM, J,1/2W	ERDS1FJ100	
R445	72000525	RESISTOR, C 10KOHM, J,1/4W	ERDS2TJ103	

Loc. No.	Part No.	Description	Reference No.	Remarks
R446	72000520	RESISTOR, C 4.7KOHM, J,1/2W	ERDS1FJ472	
R447	72000511	RESISTOR, C 10KOHM, J,1/2W	ERDS1FJ103	
R448	72000511	RESISTOR, C 10KOHM, J,1/2W	ERDS1FJ103	
R449	72000526	RESISTOR, M 47KOHM, J, 5W	ERG5FJ473H	
R450	72000526	RESISTOR, M 47KOHM, J, 5W	ERG5FJ473H	
R451	72000525	RESISTOR, C 10KOHM, J,1/4W	ERDS2TJ103	
R452	72000527	RESISTOR, M 82KOHM, J, 3W	ERG3FJS823D	
R453	72000528	RESISTOR, M 100KOHM, J, 1W	ERG1FJS104D	
R454	72000527	RESISTOR, M 82KOHM, J, 3W	ERG3FJS823D	
R456	72000511	RESISTOR, C 10KOHM, J,1/2W	ERDS1FJ103	
R457	72000511	RESISTOR, C 10KOHM, J,1/2W	ERDS1FJ103	
R458	72000529	RESISTOR, C 100 OHM, J,1/4W	ERDS2TJ101	
R459	72000530	RESISTOR, M0.22 OHM, J, 2W	ERX2FJSR22D	
R460	72000531	RESISTOR, C 6.8 OHM, J,1/4W	ERDS2TJ6R8	
R461	72000530	RESISTOR, M0.22 OHM, J, 2W	ERX2FJSR22D	
R462	72000516	RESISTOR, W 0.1 OHM, 5W	ERF5EKR10	
R463	72000517	RESISTOR, W0.15 OHM, 5W	ERF5EKR15	
R464	72000532	RESISTOR, C 1KOHM, J,1/4W	ERDS2TJ102	
R465	72000531	RESISTOR, C 6.8 OHM, J,1/4W	ERDS2TJ6R8	
R466	72000532	RESISTOR, C 1KOHM, J,1/4W	ERDS2TJ102	
R467	72000515	RESISTOR, C 220 OHM, J,1/2W	ERDS1FJ221	
R468	72000525	RESISTOR, C 10KOHM, J,1/4W	ERDS2TJ103	
R469	72000512	RESISTOR, M 22 OHM, J, 1W	ERG1FJS220D	
R470	72000515	RESISTOR, C 220 OHM, J,1/2W	ERDS1FJ221	
R471	72000533	RESISTOR, C 390 OHM, J,1/2W	ERDS1FJ391	
R472	72000513	RESISTOR, C 10 OHM, J,1/2W	ERDS1FJ100	
R474	72000534	RESISTOR, C 100KOHM, J,1/4W	ERDS2TJ104	
R475	72000534	RESISTOR, C 100KOHM, J,1/4W	ERDS2TJ104	
R476	72000513	RESISTOR, C 10 OHM, J,1/2W	ERDS1FJ100	
R478	72000535	RESISTOR, C 22KOHM, J,1/4W	ERDS2TJ223	
R481	72000536	RESISTOR, C 4.7KOHM, J,1/4W	ERDS2TJ472	
R482	72000537	RESISTOR, M 18KOHM, J, 2W	ERG2FJS183D	
R484	72000537	RESISTOR, M 18KOHM, J, 2W	ERG2FJS183D	
R487	72000529	RESISTOR, C 100 OHM, J,1/4W	ERDS2TJ101	
R488	72000538	RESISTOR, C 47 OHM, J,1/4W	ERDS2TJ470	
R489	72000534	RESISTOR, C 100KOHM, J,1/4W	ERDS2TJ104	
R492	72000535	RESISTOR, C 22KOHM, J,1/4W	ERDS2TJ223	
R493	72000536	RESISTOR, C 4.7KOHM, J,1/4W	ERDS2TJ472	
R495	72000539	RESISTOR, C 470 OHM, J,1/2W	ERDS1FJ471	
R496	72000534	RESISTOR, C 100KOHM, J,1/4W	ERDS2TJ104	

Loc. No.	Part No.	Description	Reference No.	Remarks
R500	72000540	RESISTOR, C 470 OHM, J,1/4W	ERDS2TJ471	
R502	72000536	RESISTOR, C 4.7KOHM, J,1/4W	ERDS2TJ472	
R503	72000541	RESISTOR, C 22 OHM, J,1/4W	ERDS2TJ220	
R504	72000542	RESISTOR, C 1.5KOHM, J,1/4W	ERDS2TJ152	
R505	72000543	RESISTOR, C 6.8KOHM, J,1/4W	ERDS2TJ682	
R506	72000522	RESISTOR, C 22 OHM, J,1/2W	ERDS1FJ220	
R508	72000544	RESISTOR, C 68KOHM, J,1/4W	ERDS2TJ683	
R510	72000545	RESISTOR, M2.55KOHM, F,1/4W	ER0S2CKF2551	
R511	72000546	RESISTOR, M 47KOHM, F,1/4W	ER0S2CKF4702	
R512	72000547	RESISTOR, M 22KOHM, F,1/4W	ER0S2CKF2202	
R513	72000548	RESISTOR, CONTROL 50KOHMB	EVMEASA00B54	
R514	72000931	RESISTOR, C 2.2KOHM, J,1/4W	ERDS2TJ222	
R515	72000550	RESISTOR, M1.69KOHM, F,1/4W	ER0S2CKF1691	
R516	72000535	RESISTOR, C 22KOHM, J,1/4W	ERDS2TJ223	
R517	72000535	RESISTOR, C 22KOHM, J,1/4W	ERDS2TJ223	
R518	72000535	RESISTOR, C 22KOHM, J,1/4W	ERDS2TJ223	
R519	72000535	RESISTOR, C 22KOHM, J,1/4W	ERDS2TJ223	
R521	72000551	RESISTOR, M 1.5 OHM, J, 2W	ERX2FJS1R5D	
R522	72000551	RESISTOR, M 1.5 OHM, J, 2W	ERX2FJS1R5D	
R523	72000551	RESISTOR, M 1.5 OHM, J, 2W	ERX2FJS1R5D	
R528	72000552	RESISTOR, CONTROL 10KOHMB 0.3W	EVMEASA00B14	
R529	72000535	RESISTOR, C 22KOHM, J,1/4W	ERDS2TJ223	
R531	72000543	RESISTOR, C 6.8KOHM, J,1/4W	ERDS2TJ682	
R532	72000542	RESISTOR, C 1.5KOHM, J,1/4W	ERDS2TJ152	
R533	72000553	RESISTOR, C 68 OHM, J,1/4W	ERDS2TJ680	
R534	72000554	RESISTOR, C 15KOHM, J,1/4W	ERDS2TJ153	
R535	72000555	RESISTOR, C 3.3KOHM, J,1/4W	ERDS2TJ332	
R536	72000556	RESISTOR, M 560 OHM, J, 1W	ERG1FJS561D	
R537	72000534	RESISTOR, C 100KOHM, J,1/4W	ERDS2TJ104	
R538	72000557	RESISTOR, C 150 OHM, J,1/4W	ERDS2TJ151	
R539	72000558	RESISTOR, M 39 OHM, J, 3W	ERG3FJS390D	
R540	72000543	RESISTOR, C 6.8KOHM, J,1/4W	ERDS2TJ682	
R541	72000559	RESISTOR, M 10KOHM, J, 2W	ERG2FJS103D	
R542	72000560	RESISTOR, M 22KOHM, J, 2W	ERG2FJS223D	
R543	72000561	RESISTOR, M3.65KOHM, F,1/4W	ER0S2CKF3651	
R544	72000562	RESISTOR, M 383 OHM, F,1/4W	ER0S2CKF3830	
R548	72000563	RESISTOR, CONTROL 20KOHMB 0.3W	EVMEASA00B24	
R549	72000513	RESISTOR, C 10 OHM, J,1/2W	ERDS1FJ100	
R552	72000522	RESISTOR, C 22 OHM, J,1/2W	ERDS1FJ220	
R554	72000525	RESISTOR, C 10KOHM, J,1/4W	ERDS2TJ103	
R555	72000536	RESISTOR, C 4.7KOHM, J,1/4W	ERDS2TJ472	
R556	72000525	RESISTOR, C 10KOHM, J,1/4W	ERDS2TJ103	
R557	72000534	RESISTOR, C 100KOHM, J,1/4W	ERDS2TJ104	
R558	72000538	RESISTOR, C 47 OHM, J,1/4W	ERDS2TJ470	
R559	72000536	RESISTOR, C 4.7KOHM, J,1/4W	ERDS2TJ472	
R560	72000564	RESISTOR, C 560 OHM, J,1/4W	ERDS2TJ561	
R561	72000540	RESISTOR, C 470 OHM, J,1/4W	ERDS2TJ471	
R562	72000525	RESISTOR, C 10KOHM, J,1/4W	ERDS2TJ103	
R563	72000565	RESISTOR, C 47KOHM, J,1/4W	ERDS2TJ473	
R564	72000527	RESISTOR, M 82KOHM, J, 3W	ERG3FJS823D	
R565	72000527	RESISTOR, M 82KOHM, J, 3W	ERG3FJS823D	
R566	72000527	RESISTOR, M 82KOHM, J, 3W	ERG3FJS823D	
R567	72000566	RESISTOR, M 470 OHM, J, 2W	ERG2FJS471D	
R568	72000566	RESISTOR, M 470 OHM, J, 2W	ERG2FJS471D	
R569	72000567	RESISTOR, M4.42KOHM, F,1/4W	ER0S2CKF4421	
R571	72000568	RESISTOR, F 10 OHM, J,1/4W	ERQ14AJ100P	
R572	72000568	RESISTOR, F 10 OHM, J,1/4W	ERQ14AJ100P	
R573	72000569	RESISTOR, F 220 OHM, J,1/4W	ERQ14AJ221P	
R576	72000534	RESISTOR, C 100KOHM, J,1/4W	ERDS2TJ104	
R580	72000570	RESISTOR, C 33KOHM, J,1/4W	ERDS2TJ333	
R581	72000570	RESISTOR, C 33KOHM, J,1/4W	ERDS2TJ333	
R582	72000532	RESISTOR, C 1KOHM, J,1/4W	ERDS2TJ102	
R583	72000535	RESISTOR, C 22KOHM, J,1/4W	ERDS2TJ223	
R600	72000571	RESISTOR, M 82KOHM,J,1/10W	ERJ6GEYJ823	
R601	72000487	RESISTOR, M 39KOHM,J,1/10W	ERJ6GEYJ393	
R602	72000480	RESISTOR, M 5.6KOHM,J,1/10W	ERJ6GEYJ562	
R603	72000930	RESISTOR, M 15KOHM,J,1/10W	ERJ6GEYJ153	
R604	72000930	RESISTOR, M 15KOHM,J,1/10W	ERJ6GEYJ153	
R605	72000572	RESISTOR, M 100 OHM, J,1/2W	ERG12SJ101P	
R606	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R607	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R608	72000473	RESISTOR, M 0 OHM,J,1/10W	ERJ6GEY0R00	
R609	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R610	72000571	RESISTOR, M 82KOHM,J,1/10W	ERJ6GEYJ823	
R611	72000487	RESISTOR, M 39KOHM,J,1/10W	ERJ6GEYJ393	
R612	72000572	RESISTOR, M 100 OHM, J,1/2W	ERG12SJ101P	
R613	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R614	72000504	RESISTOR, M 220 OHM,J,1/10W	ERJ6GEYJ221	
R616	72000573	RESISTOR, M 11KOHM, 1/10W	ERJ6ENF1102	
R617	72000487	RESISTOR, M 39KOHM,J,1/10W	ERJ6GEYJ393	

Loc. No.	Part No.	Description	Reference No.	Remarks
R618	72000478	RESISTOR, M 22KOHM,J,1/10W	ERJ6GEYJ223	
R619	72000475	RESISTOR, M 2.2KOHM,J,1/10W	ERJ6GEYJ222	
R620	72000480	RESISTOR, M 5.6KOHM,J,1/10W	ERJ6GEYJ562	
R621	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R622	72000473	RESISTOR, M 0 OHM,J,1/10W	ERJ6GEY0R00	
R623	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R630	72000932	RESISTOR, C 1KOHM, J,1/4W	ERD25FJ102	
R632	72000475	RESISTOR, M 2.2KOHM,J,1/10W	ERJ6GEYJ222	
R634	72000575	RESISTOR, M 470KOHM,J,1/10W	ERJ6GEYJ474	
R635	72000478	RESISTOR, M 22KOHM,J,1/10W	ERJ6GEYJ223	
R636	72000576	RESISTOR, M 6.8KOHM,J,1/10W	ERJ6GEYJ682	
R638	72000478	RESISTOR, M 22KOHM,J,1/10W	ERJ6GEYJ223	
R639	72000936	RESISTOR, CONTROL 50KOHMB	EVMEGSA00B54	
R640	72000475	RESISTOR, M 2.2KOHM,J,1/10W	ERJ6GEYJ222	
R641	72000477	RESISTOR, M 47KOHM,J,1/10W	ERJ6GEYJ473	
R642	72000577	RESISTOR, M2.49KOHM, 1/10W	ERJ6ENF2491	
R644	72000477	RESISTOR, M 47KOHM,J,1/10W	ERJ6GEYJ473	
R645	72000578	RESISTOR, M 68KOHM, 1/10W	ERJ6ENF6802	
R646	72000578	RESISTOR, M 68KOHM, 1/10W	ERJ6ENF6802	
R647	72000578	RESISTOR, M 68KOHM, 1/10W	ERJ6ENF6802	
R648	72000475	RESISTOR, M 2.2KOHM,J,1/10W	ERJ6GEYJ222	
R649	72000492	RESISTOR, M 56KOHM,J,1/10W	ERJ6GEYJ563	
R650	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R651	72000492	RESISTOR, M 56KOHM,J,1/10W	ERJ6GEYJ563	
R652	72000493	RESISTOR, M 33KOHM,J,1/10W	ERJ6GEYJ333	
R653	72000493	RESISTOR, M 33KOHM,J,1/10W	ERJ6GEYJ333	
R654	72000556	RESISTOR, M 560 OHM, J, 1W	ERG1FJS561D	
R655	72000935	RESISTOR, C 470 OHM, J,1/4W	ERD25FJ471	
R656	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R657	72000490	RESISTOR, M 100KOHM,J,1/10W	ERJ6GEYJ104	
R658	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R659	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R661	72000580	RESISTOR, C 8.2KOHM, J,1/4W	ERD25FJ822	
R662	72000581	RESISTOR, M 1.5KOHM,J,1/10W	ERJ6GEYJ152	
R663	72000582	RESISTOR, M 4.7 OHM, J,1/2W	ERX12SJ4R7	
R664	72000583	RESISTOR, M 8.2 OHM, J, 1W	ERX1FJS8R2D	
R665	72000513	RESISTOR, C 10 OHM, J,1/2W	ERDS1FJ100	
R666	72000485	RESISTOR, M 1.8KOHM,J,1/10W	ERJ6GEYJ182	
R667	72000503	RESISTOR, M 330 OHM,J,1/10W	ERJ6GEYJ331	
R668	72000490	RESISTOR, M 100KOHM,J,1/10W	ERJ6GEYJ104	

Loc. No.	Part No.	Description	Reference No.	Remarks
R700	72000584	RESISTOR, M 390 OHM,J,1/10W	ERJ6GEYJ391	
R701	72000585	RESISTOR, M 68 OHM,J,1/10W	ERJ6GEYJ680	
R702	72000585	RESISTOR, M 68 OHM,J,1/10W	ERJ6GEYJ680	
R703	72000472	RESISTOR, M 270 OHM,J,1/10W	ERJ6GEYJ271	
R704	72000478	RESISTOR, M 22KOHM,J,1/10W	ERJ6GEYJ223	
R705	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R706	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R707	72000937	RESISTOR, M 1.5MOHM,J,1/10W	ERJ6GEYJ155	
R708	72000587	RESISTOR, M 240 OHM,J,1/10W	ERJ6GEYJ241	
R709	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R710	72000481	RESISTOR, M 560 OHM,J,1/10W	ERJ6GEYJ561	
R711	72000485	RESISTOR, M 1.8KOHM,J,1/10W	ERJ6GEYJ182	
R712	72000478	RESISTOR, M 22KOHM,J,1/10W	ERJ6GEYJ223	
R713	72000588	RESISTOR, M 1.5KOHM, 1/10W	ERJ6ENF1501	
R714	72000588	RESISTOR, M 1.5KOHM, 1/10W	ERJ6ENF1501	
R715	72000477	RESISTOR, M 47KOHM,J,1/10W	ERJ6GEYJ473	
R716	72000478	RESISTOR, M 22KOHM,J,1/10W	ERJ6GEYJ223	
R717	72000589	RESISTOR, M 4.7KOHM, 1/10W	ERJ6ENF4701	
R718	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R719	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R720	72000934	RESISTOR, C 4.7KOHM, J,1/4W	ERD25FJ472	
R721	72000478	RESISTOR, M 22KOHM,J,1/10W	ERJ6GEYJ223	
R722	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R723	72000477	RESISTOR, M 47KOHM,J,1/10W	ERJ6GEYJ473	
R724	72000588	RESISTOR, M 1.5KOHM, 1/10W	ERJ6ENF1501	
R725	72000477	RESISTOR, M 47KOHM,J,1/10W	ERJ6GEYJ473	
R726	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R750	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R751	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R752	72000490	RESISTOR, M 100KOHM,J,1/10W	ERJ6GEYJ104	
R753	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R754	72000478	RESISTOR, M 22KOHM,J,1/10W	ERJ6GEYJ223	
R755	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R756	72000592	RESISTOR, M19.1KOHM, 1/10W	ERJ6ENF1913	
R758	72000489	RESISTOR, M 150KOHM,J,1/10W	ERJ6GEYJ154	
R759	72000490	RESISTOR, M 100KOHM,J,1/10W	ERJ6GEYJ104	
R760	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R761	72000593	RESISTOR, M 10KOHM, 1/10W	ERJ6ENF1002	
R762	72000477	RESISTOR, M 47KOHM,J,1/10W	ERJ6GEYJ473	
R763	72000593	RESISTOR, M 10KOHM, 1/10W	ERJ6ENF1002	

Loc. No.	Part No.	Description	Reference No.	Remarks
R764	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R765	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R766	72000477	RESISTOR, M 47KOHM,J,1/10W	ERJ6GEYJ473	
R767	72000594	RESISTOR, M 200KOHM, 1/10W	ERJ6ENF2003	
R768	72000595	RESISTOR, M61.9KOHM, 1/10W	ERJ6ENF6192	
R769	72000596	RESISTOR, M 100KOHM, 1/10W	ERJ6ENF1003	
R770	72000596	RESISTOR, M 100KOHM, 1/10W	ERJ6ENF1003	
R775	72000933	RESISTOR, C 22KOHM, J,1/4W	ERD25FJ223	
R776	72000933	RESISTOR, C 22KOHM, J,1/4W	ERD25FJ223	
R777	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R778	72000930	RESISTOR, M 15KOHM,J,1/10W	ERJ6GEYJ153	
R779	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R780	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R781	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R782	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R783	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R784	72000478	RESISTOR, M 22KOHM,J,1/10W	ERJ6GEYJ223	
R785	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R786	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R787	72000477	RESISTOR, M 47KOHM,J,1/10W	ERJ6GEYJ473	
R788	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R789	72000490	RESISTOR, M 100KOHM,J,1/10W	ERJ6GEYJ104	
R793	72000598	RESISTOR, M 27KOHM,J,1/10W	ERJ6GEYJ273	
R794	72000598	RESISTOR, M 27KOHM,J,1/10W	ERJ6GEYJ273	
R795	72000478	RESISTOR, M 22KOHM,J,1/10W	ERJ6GEYJ223	
R796	72000478	RESISTOR, M 22KOHM,J,1/10W	ERJ6GEYJ223	
R797	72000493	RESISTOR, M 33KOHM,J,1/10W	ERJ6GEYJ333	
R798	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R799	72000478	RESISTOR, M 22KOHM,J,1/10W	ERJ6GEYJ223	
R8003	72000498	RESISTOR, M 180KOHM,J,1/10W	ERJ6GEYJ184	
R8004	72000478	RESISTOR, M 22KOHM,J,1/10W	ERJ6GEYJ223	
R8005	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R8006	72000484	RESISTOR, M 3.3KOHM,J,1/10W	ERJ6GEYJ332	
R8007	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R8008	72000484	RESISTOR, M 3.3KOHM,J,1/10W	ERJ6GEYJ332	
R8009	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R8010	72000484	RESISTOR, M 3.3KOHM,J,1/10W	ERJ6GEYJ332	
R8011	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R8012	72000484	RESISTOR, M 3.3KOHM,J,1/10W	ERJ6GEYJ332	
R8013	72000599	RESISTOR, M 4.3KOHM, 1/10W	ERJ6ENF4301	

Loc. No.	Part No.	Description	Reference No.	Remarks
R8014	72000497	RESISTOR, M 22 OHM,J,1/10W	ERJ6GEYJ220	
R8015	72000472	RESISTOR, M 270 OHM,J,1/10W	ERJ6GEYJ271	
R8016	72000750	RESISTOR, M 1KOHM, 1/10W	ERJ6ENF1001	
R8017	72000497	RESISTOR, M 22 OHM,J,1/10W	ERJ6GEYJ220	
R8018	72000750	RESISTOR, M 1KOHM, 1/10W	ERJ6ENF1001	
R8019	72000497	RESISTOR, M 22 OHM,J,1/10W	ERJ6GEYJ220	
R8020	72000750	RESISTOR, M 1KOHM, 1/10W	ERJ6ENF1001	
R8021	72000497	RESISTOR, M 22 OHM,J,1/10W	ERJ6GEYJ220	
R8022	72000600	RESISTOR, M 680 OHM,J,1/10W	ERJ6GEYJ681	
R8023	72000601	RESISTOR, M5.62KOHM, 1/10W	ERJ6ENF5621	
R8024	72000485	RESISTOR, M 1.8KOHM,J,1/10W	ERJ6GEYJ182	
R8025	72000602	RESISTOR, M 1.2KOHM, 1/10W	ERJ6ENF1201	
R8026	72000602	RESISTOR, M 1.2KOHM, 1/10W	ERJ6ENF1201	
R8027	72000602	RESISTOR, M 1.2KOHM, 1/10W	ERJ6ENF1201	
R8028	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R8029	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R8030	72000603	RESISTOR, M 33 OHM,J,1/10W	ERJ6GEYJ330	
R8031	72000492	RESISTOR, M 56KOHM,J,1/10W	ERJ6GEYJ563	
R8032	72000493	RESISTOR, M 33KOHM,J,1/10W	ERJ6GEYJ333	
R8033	72000503	RESISTOR, M 330 OHM,J,1/10W	ERJ6GEYJ331	
R8034	72000503	RESISTOR, M 330 OHM,J,1/10W	ERJ6GEYJ331	
R8035	72000503	RESISTOR, M 330 OHM,J,1/10W	ERJ6GEYJ331	
R8036	72000604	RESISTOR, M 221 OHM, 1/10W	ERJ6ENF2210	
R8037	72000499	RESISTOR, M 75 OHM, 1/10W	ERJ6ENF75R0	
R8038	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R8039	72000499	RESISTOR, M 75 OHM, 1/10W	ERJ6ENF75R0	
R8040	72000484	RESISTOR, M 3.3KOHM,J,1/10W	ERJ6GEYJ332	
R8041	72000499	RESISTOR, M 75 OHM, 1/10W	ERJ6ENF75R0	
R8043	72000472	RESISTOR, M 270 OHM,J,1/10W	ERJ6GEYJ271	
R8044	72000750	RESISTOR, M 1KOHM, 1/10W	ERJ6ENF1001	
R8045	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R8046	72000605	RESISTOR, M 1.2KOHM,J,1/10W	ERJ6GEYJ122	
R8047	72000606	RESISTOR, M 470 OHM, 1/10W	ERJ6ENF4700	
R8048	72000605	RESISTOR, M 1.2KOHM,J,1/10W	ERJ6GEYJ122	
R8049	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R8050	72000605	RESISTOR, M 1.2KOHM,J,1/10W	ERJ6GEYJ122	
R8051	72000492	RESISTOR, M 56KOHM,J,1/10W	ERJ6GEYJ563	
R8052	72000493	RESISTOR, M 33KOHM,J,1/10W	ERJ6GEYJ333	
R8053	72000604	RESISTOR, M 221 OHM, 1/10W	ERJ6ENF2210	
R8054	72000504	RESISTOR, M 220 OHM,J,1/10W	ERJ6GEYJ221	

Loc. No.	Part No.	Description	Reference No.	Remarks
R8055	72000604	RESISTOR, M 221 OHM, 1/10W	ERJ6ENF2210	
R8056	72000475	RESISTOR, M 2.2KOHM,J,1/10W	ERJ6GEYJ222	
R8057	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R8058	72000503	RESISTOR, M 330 OHM,J,1/10W	ERJ6GEYJ331	
R8061	72000504	RESISTOR, M 220 OHM,J,1/10W	ERJ6GEYJ221	
R8063	72000492	RESISTOR, M 56KOHM,J,1/10W	ERJ6GEYJ563	
R8064	72000493	RESISTOR, M 33KOHM,J,1/10W	ERJ6GEYJ333	
R8065	72000604	RESISTOR, M 221 OHM, 1/10W	ERJ6ENF2210	
R8066	72000503	RESISTOR, M 330 OHM,J,1/10W	ERJ6GEYJ331	
R8067	72000604	RESISTOR, M 221 OHM, 1/10W	ERJ6ENF2210	
R8068	72000477	RESISTOR, M 47KOHM,J,1/10W	ERJ6GEYJ473	
R8069	72000470	RESISTOR, M 220KOHM,J,1/10W	ERJ6GEYJ224	
R8070	72000750	RESISTOR, M 1KOHM, 1/10W	ERJ6ENF1001	
R8071	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R8072	72000471	RESISTOR, M 470 OHM,J,1/10W	ERJ6GEYJ471	
R8073	72000607	RESISTOR, M 330 OHM, 1/10W	ERJ6ENF3300	
R8074	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R8075	72000475	RESISTOR, M 2.2KOHM,J,1/10W	ERJ6GEYJ222	
R8077	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R8078	72000471	RESISTOR, M 470 OHM,J,1/10W	ERJ6GEYJ471	
R8080	72000503	RESISTOR, M 330 OHM,J,1/10W	ERJ6GEYJ331	
R8081	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R8082	72000492	RESISTOR, M 56KOHM,J,1/10W	ERJ6GEYJ563	
R8083	72000493	RESISTOR, M 33KOHM,J,1/10W	ERJ6GEYJ333	
R8084	72000604	RESISTOR, M 221 OHM, 1/10W	ERJ6ENF2210	
R8085	72000624	RESISTOR, M 8.2KOHM,J,1/10W	ERJ6GEYJ822	
R8086	72000475	RESISTOR, M 2.2KOHM,J,1/10W	ERJ6GEYJ222	
R8087	72000472	RESISTOR, M 270 OHM,J,1/10W	ERJ6GEYJ271	
R8088	72000472	RESISTOR, M 270 OHM,J,1/10W	ERJ6GEYJ271	
R8089	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R8090	72000930	RESISTOR, M 15KOHM,J,1/10W	ERJ6GEYJ153	
R8091	72000472	RESISTOR, M 270 OHM,J,1/10W	ERJ6GEYJ271	
R8092	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R8093	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R8094	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R8095	72000600	RESISTOR, M 680 OHM,J,1/10W	ERJ6GEYJ681	
R8098	72000603	RESISTOR, M 33 OHM,J,1/10W	ERJ6GEYJ330	
R8100	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R8101	72000930	RESISTOR, M 15KOHM,J,1/10W	ERJ6GEYJ153	
R8103	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	

Loc. No.	Part No.	Description	Reference No.	Remarks
R8112	72000625	RESISTOR, RESISTOR ARRAY	EXB38V330J	
R8113	72000625	RESISTOR, RESISTOR ARRAY	EXB38V330J	
R8114	72000480	RESISTOR, M 5.6KOHM,J,1/10W	ERJ6GEYJ562	
R8116	72000625	RESISTOR, RESISTOR ARRAY	EXB38V330J	
R8117	72000484	RESISTOR, M 3.3KOHM,J,1/10W	ERJ6GEYJ332	
R8118	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R8120	72000490	RESISTOR, M 100KOHM,J,1/10W	ERJ6GEYJ104	
R8121	72000603	RESISTOR, M 33 OHM,J,1/10W	ERJ6GEYJ330	
R8122	72000625	RESISTOR, RESISTOR ARRAY	EXB38V330J	
R8124	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R8125	72000603	RESISTOR, M 33 OHM,J,1/10W	ERJ6GEYJ330	
R8126	72000475	RESISTOR, M 2.2KOHM,J,1/10W	ERJ6GEYJ222	
R8128	72000625	RESISTOR, RESISTOR ARRAY	EXB38V330J	
R8129	72000497	RESISTOR, M 22 OHM,J,1/10W	ERJ6GEYJ220	
R8130	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R8131	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R8132	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R8133	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R8134	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R8135	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R8136	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R8138	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R8139	72000626	RESISTOR, M 18KOHM,J,1/10W	ERJ6GEYJ183	
R8140	72000471	RESISTOR, M 470 OHM,J,1/10W	ERJ6GEYJ471	
R8141	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R8142	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R8143	72000475	RESISTOR, M 2.2KOHM,J,1/10W	ERJ6GEYJ222	
R8144	72000475	RESISTOR, M 2.2KOHM,J,1/10W	ERJ6GEYJ222	
R8145	72000475	RESISTOR, M 2.2KOHM,J,1/10W	ERJ6GEYJ222	
R8146	72000471	RESISTOR, M 470 OHM,J,1/10W	ERJ6GEYJ471	
R8175	72000493	RESISTOR, M 33KOHM,J,1/10W	ERJ6GEYJ333	
R8176	72000626	RESISTOR, M 18KOHM,J,1/10W	ERJ6GEYJ183	
R8181	72000627	RESISTOR, M 180 OHM,J,1/10W	ERJ6GEYJ181	
R8182	72000492	RESISTOR, M 56KOHM,J,1/10W	ERJ6GEYJ563	
R8183	72000503	RESISTOR, M 330 OHM,J,1/10W	ERJ6GEYJ331	
R8185	72000478	RESISTOR, M 22KOHM,J,1/10W	ERJ6GEYJ223	
R8186	72000481	RESISTOR, M 560 OHM,J,1/10W	ERJ6GEYJ561	
R8187	72000481	RESISTOR, M 560 OHM,J,1/10W	ERJ6GEYJ561	
R8188	72000473	RESISTOR, M 0 OHM,J,1/10W	ERJ6GEY0R00	
R8189	72000497	RESISTOR, M 22 OHM,J,1/10W	ERJ6GEYJ220	

Loc. No.	Part No.	Description	Reference No.	Remarks
R8190	72000497	RESISTOR, M 22 OHM,J,1/10W	ERJ6GEYJ220	
R8191	72000628	RESISTOR, M 18 OHM,J,1/10W	ERJ6GEYJ180	
R8194	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R8196	72000474	RESISTOR, M 1KOHM,J,1/10W	ERJ6GEYJ102	
R8197	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R8198	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R8200	72000476	RESISTOR, M 4.7KOHM,J,1/10W	ERJ6GEYJ472	
R8201	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R8205	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R8221	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R8222	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R8225	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R8226	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R8227	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R8228	72000486	RESISTOR, M 10KOHM,J,1/10W	ERJ6GEYJ103	
R8231	72000625	RESISTOR, RESISTOR ARRAY	EXB38V330J	
R8232	72000625	RESISTOR, RESISTOR ARRAY	EXB38V330J	
R8233	72000625	RESISTOR, RESISTOR ARRAY	EXB38V330J	
R8234	72000625	RESISTOR, RESISTOR ARRAY	EXB38V330J	
R8235	72000625	RESISTOR, RESISTOR ARRAY	EXB38V330J	
R8236	72000625	RESISTOR, RESISTOR ARRAY	EXB38V330J	
R8237	72000625	RESISTOR, RESISTOR ARRAY	EXB38V330J	
R8238	72000629	RESISTOR, RESISTOR ARRAY	EXB38V104J	
R8239	72000629	RESISTOR, RESISTOR ARRAY	EXB38V104J	
R8240	72000629	RESISTOR, RESISTOR ARRAY	EXB38V104J	
R8241	72000629	RESISTOR, RESISTOR ARRAY	EXB38V104J	
R8242	72000629	RESISTOR, RESISTOR ARRAY	EXB38V104J	
R8243	72000629	RESISTOR, RESISTOR ARRAY	EXB38V104J	
R8251	72000503	RESISTOR, M 330 OHM,J,1/10W	ERJ6GEYJ331	
R8252	72000503	RESISTOR, M 330 OHM,J,1/10W	ERJ6GEYJ331	
R8276	72000629	RESISTOR, RESISTOR ARRAY	EXB38V104J	
R8277	72000629	RESISTOR, RESISTOR ARRAY	EXB38V104J	
R8278	72000497	RESISTOR, M 22 OHM,J,1/10W	ERJ6GEYJ220	
R8280	72000605	RESISTOR, M 1.2KOHM,J,1/10W	ERJ6GEYJ122	
R8281	72000603	RESISTOR, M 33 OHM,J,1/10W	ERJ6GEYJ330	
R8332	72000630	RESISTOR, M 150 OHM,J,1/10W	ERJ6GEYJ151	
R8428	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R8429	72000603	RESISTOR, M 33 OHM,J,1/10W	ERJ6GEYJ330	
R8430	72000581	RESISTOR, M 1.5KOHM,J,1/10W	ERJ6GEYJ152	
R8431	72000581	RESISTOR, M 1.5KOHM,J,1/10W	ERJ6GEYJ152	
R8432	72000581	RESISTOR, M 1.5KOHM,J,1/10W	ERJ6GEYJ152	
R8434	72000492	RESISTOR, M 56KOHM,J,1/10W	ERJ6GEYJ563	
R8435	72000478	RESISTOR, M 22KOHM,J,1/10W	ERJ6GEYJ223	
R8612	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R8614	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R8617	72000495	RESISTOR, M 100 OHM,J,1/10W	ERJ6GEYJ101	
R900	72000631	RESISTOR, S 1MOHM, K,1/2W	ERC12ZGK105	
R901	72000631	RESISTOR, S 1MOHM, K,1/2W	ERC12ZGK105	
R921	72000513	RESISTOR, C 10 OHM, J,1/2W	ERDS1FJ100	
R922	72000582	RESISTOR, M 4.7 OHM, J,1/2W	ERX12SJ4R7	
R923	72000632	RESISTOR, C 680 OHM, J,1/4W	ERDS2TJ681	
R924	72000633	RESISTOR, C 1.8KOHM, J,1/4W	ERDS2TJ182	
R925	72000542	RESISTOR, C 1.5KOHM, J,1/4W	ERDS2TJ152	
R926	72000634	RESISTOR, M0.68 OHM, J, 2W	ERX2FJSR68D	
R927	72000635	RESISTOR, C 120KOHM, J,1/4W	ERDS2TJ124	
R928	72000534	RESISTOR, C 100KOHM, J,1/4W	ERDS2TJ104	
R929	72000536	RESISTOR, C 4.7KOHM, J,1/4W	ERDS2TJ472	
R930	72000583	RESISTOR, M 8.2 OHM, J, 1W	ERX1FJS8R2D	
R931	72000525	RESISTOR, C 10KOHM, J,1/4W	ERDS2TJ103	
R933	72000529	RESISTOR, C 100 OHM, J,1/4W	ERDS2TJ101	
R934	72000554	RESISTOR, C 15KOHM, J,1/4W	ERDS2TJ153	
R935	72000636	RESISTOR, M 100KOHM, J, 2W	ERG2FJS104D	
R936	72000636	RESISTOR, M 100KOHM, J, 2W	ERG2FJS104D	
R937	72000534	RESISTOR, C 100KOHM, J,1/4W	ERDS2TJ104	
R938	72000637	RESISTOR, M 150 OHM, J, 1W	ERG1FJS151D	
R947	72000638	RESISTOR, M 100KOHM, J, 3W	ERG3FJS104D	
R949	72000539	RESISTOR, C 470 OHM, J,1/2W	ERDS1FJ471	
R950	72000522	RESISTOR, C 22 OHM, J,1/2W	ERDS1FJ220	
R951	72000543	RESISTOR, C 6.8KOHM, J,1/4W	ERDS2TJ682	
R952	72000536	RESISTOR, C 4.7KOHM, J,1/4W	ERDS2TJ472	
R953	72000543	RESISTOR, C 6.8KOHM, J,1/4W	ERDS2TJ682	
R954	72000557	RESISTOR, C 150 OHM, J,1/4W	ERDS2TJ151	
R955	72000543	RESISTOR, C 6.8KOHM, J,1/4W	ERDS2TJ682	
R956	72000554	RESISTOR, C 15KOHM, J,1/4W	ERDS2TJ153	
R957	72000639	RESISTOR, C 3.9KOHM, J,1/4W	ERDS2TJ392	
R958	72000542	RESISTOR, C 1.5KOHM, J,1/4W	ERDS2TJ152	
R959	72000640	RESISTOR, C 62KOHM, J,1/4W	ERDS2TJ623	
R960	72000563	RESISTOR, CONTROL 20KOHMB 0.3W	EVMEASA00B24	
R961	72000931	RESISTOR, C 2.2KOHM, J,1/4W	ERDS2TJ222	
R962	72000641	RESISTOR, M 4.7KOHM, J, 3W	ERG3FJS472D	

Loc. No.	Part No.	Description	Reference No.	Remarks
R963	72000642	RESISTOR, M 18KOHM, J, 3W	ERG3FJS183D	
R964	72000643	RESISTOR, M 10 OHM, J,1/2W	ERG12SJ100	
R965	72000542	RESISTOR, C 1.5KOHM, J,1/4W	ERDS2TJ152	
R966	72000544	RESISTOR, C 68KOHM, J,1/4W	ERDS2TJ683	
R967	72000563	RESISTOR, CONTROL 20KOHMB 0.3W	EVMEASA00B24	
R968	72000542	RESISTOR, C 1.5KOHM, J,1/4W	ERDS2TJ152	
R969	72000633	RESISTOR, C 1.8KOHM, J,1/4W	ERDS2TJ182	
R970	72000534	RESISTOR, C 100KOHM, J,1/4W	ERDS2TJ104	
R981	72000490	RESISTOR, M 100KOHM,J,1/10W	ERJ6GEYJ104	
R982	72000928	RESISTOR, M 1MOHM,J,1/10W	ERJ6GEYJ105	
R983	72000645	RESISTOR, M0.12 OHM, J,1/2W	ERX12SZJR12	
R984	72000645	RESISTOR, M0.12 OHM, J,1/2W	ERX12SZJR12	
R985	72000646	RESISTOR, M 180 OHM, 1/10W	ERJ6ENF1800	
R986	72000750	RESISTOR, M 1KOHM, 1/10W	ERJ6ENF1001	
R987	72000646	RESISTOR, M 180 OHM, 1/10W	ERJ6ENF1800	
RL400	72000647	RELAY	K6B1AGA00086	⚠
RL401	72000648	RELAY	TSEH0025	⚠
RM001	72000649	REMOCO RECEIVER, PNA4601M05TV	PNA4601M05TV	
S061	72000650	POWER SWITCH	TSE4GD0001	
S1554	72000651	SWITCH	EVQPBD05R	
S1555	72000651	SWITCH	EVQPBD05R	
S1556	72000651	SWITCH	EVQPBD05R	
S701	72000652	SWITCH	ESD11H220	
T400	72000653	TRANSFORMER	G4D5A0000008	⚠
T401	72000654	TRANSFORMER	G4D5A0000009	⚠
T402	72000655	TRANSFORMER	ETS25AD186AG	⚠
T404	72000656	TRANSFORMER	ETH19K191AM	
T405	72000656	TRANSFORMER	ETH19K191AM	
T921	72000657	TRANSFORMER	G4D3A0000039	⚠
UC1	72701185	PC BOARD ASSY, C1, TNPA1914	TNPA1914	⚠
UC2	72701186	PC BOARD ASSY, C2, TNPA1915	TNPA1915	⚠
UC3	72701187	PC BOARD ASSY, C3, TNPA1916	TNPA1916	⚠
UC4	72701188	PC BOARD ASSY, C4, TNPA1917	TNPA1917	⚠
UC5	72701189	PC BOARD ASSY, C5, TNPA1918	TNPA1918	⚠
UC6	72701190	PC BOARD ASSY, C6, TNPA1919	TNPA1919	⚠
UC7	72701191	PC BOARD ASSY, C7, TNPA1993	TNPA1993	⚠
UC8	72701192	PC BOARD ASSY, C8, TNPA2277	TNPA2277	⚠
UD	72701217	PC BOARD ASSY, D, TZTNP02JSSR	TZTNP02JSSR	50WP16R/ H/A/EA ⚠
UD	72701218	PC BOARD ASSY, D, TZTNP01JSSC	TZTNP01JSSC	50WP16C ⚠
UD	72701219	PC BOARD ASSY, D, TZTNP02JSSU	TZTNP02JSSU	50HP81 ⚠
UDG	72701194	PC BOARD ASSY, DG, TXNDG10L33	TXNDG10L33	⚠
UF	72701245	PC BOARD ASSY, F, TXN/F10HAS	TXN/F10HAS	50WP16R/ H/A/EA/C ⚠
UF	72701195	PC BOARD ASSY, F, TXN/F10L32	TXN/F10L32	50HP81 ⚠
UH	72701216	PC BOARD ASSY, H, TZTNP01JSSR	TZTNP01JSSR	50WP16R/ H/A/EA/C ⚠
UH	72701215	PC BOARD ASSY, H, TZTNP01JSSU	TZTNP01JSSU	50HP81 ⚠

Loc. No.	Part No.	Description	Reference No.	Remarks
UH3	72701197	PC BOARD ASSY, H3, TNPA1756AB	TNPA1756AB	⚠
UP1	72701198	PC BOARD ASSY, P1, TXNP110L32	TXNP110L32	⚠
UP3	72701199	PC BOARD ASSY, P3, TNPA1907	TNPA1907	⚠
UP4	72701200	PC BOARD ASSY, P4, TNPA1908	TNPA1908	⚠
UP5	72701201	PC BOARD ASSY, P5, TNPA1909	TNPA1909	⚠
UP6	72701202	PC BOARD ASSY, P6, TNPA1910	TNPA1910	⚠
UP7	72701203	PC BOARD ASSY, P7, TNPA1911	TNPA1911	⚠
UP8	72701204	PC BOARD ASSY, P8, TNPA1912	TNPA1912	⚠
UP9	72701205	PC BOARD ASSY, P9, TNPA1906	TNPA1906	⚠
US1	72701206	PC BOARD ASSY, S1, TNPA1784	TNPA1784	⚠
USC	72701207	PC BOARD ASSY, SC, TNPA1922	TNPA1922	⚠
USD	72701208	PC BOARD ASSY, SD, TNPA1921	TNPA1921	⚠
USS	72701209	PC BOARD ASSY, SS, TNPA1923	TNPA1923	⚠
USS2	72701210	PC BOARD ASSY, SS2, TNPA1924	TNPA1924	⚠
USS3	72701211	PC BOARD ASSY, SS3, TNPA1925	TNPA1925	⚠
USU	72701212	PC BOARD ASSY, SU, TNPA1920	TNPA1920	⚠
UT11	72701213	PC BOARD ASSY, T11, TNPA1996	TNPA1996	⚠
UV1	72701214	PC BOARD ASSY, V1, TNPA1783	TNPA1783	⚠
X3501	72000658	X´tal, 18.432MHz, TSS9028-N	TSS9028-N	
X8001	72000659	X´tal, TSSA115	TSSA115	
X8003	72000660	X´tal, TSSA072	TSSA072	

19 Specifications

Specifications

Power Source:	AC220 - 240V 50/60Hz (50WP16SERIES)
	AC120V 50/60Hz (50HP81)
Power Consumption:	530 W
	3.0W (stand-by condition)
	1.4W (Power off condition)
Plasma Display panel:	Drive method AC type
	50-inch, 16:9 aspect ratio
Contrast Ratio	3000:1
Brightness Capability	(Panel only) 500 cd / m^2
	(As a set) 300 cd / m^2
Screen size:	1106 mm (W)×622 mm (H)×1269 mm (diagonal)
	No. of pixels
	1,049,088 (1366 (W)×768 (H)) [4,098×768 dots]
Operating condition:	
Temperature	34 °F - 104 °F (0 °C - 40 °C)
Humidity	20 % - 80 %
Applicable signals:	
Color System	NTSC, PAL, PAL60, SECAM, Modified NTSC
Scanning format	525i (480i), 625i (575i), 525p (480p), 750p (720p), 1125i (1080i)
PC signals	XGA display
	VGA, SVGA
	SXGA, UXGA (compressed)
	Horizontal scanning frequency 15.5 - 110kHz
	Vertical scanning frequency 48 - 120Hz
Connection terminals:	
AV	
Video in (BNC)	1.0 Vp-p (75-ohm)
S-VIDEO IN (MINI DIN 4PIN)	Y: 1 Vp-p (75-ohm), C: 0.286 Vp-p (75-ohm)
AUDIO IN (RCA PIN JACK × 2)	0.5 Vrms (high impedance)
COMPONENT/RGB	
Y/G (BNC)	1.0 Vp-p/composite (75-ohm)
	0.7 Vp-p/non-composite (75-ohm)
P_B/B (BNC)	0.7 Vp-p (75-ohm)
P_R/R (BNC)	0.7 Vp-p (75-ohm)
HD (BNC)	1.0 - 5.0 Vp-p (high impedance)
VD (BNC)	1.0 - 5.0 Vp-p (high impedance)
AUDIO IN (RCA PIN JACK×2)	0.5 Vrms (high impedance)
PC	
(HIGH-DENSITY D-SUB15PIN)	R,G,B/0.7 Vp-p (75-ohm)
	HD, VD/1.0 - 5.0 Vp-p (high impedance)
AUDIO IN (M3.5 JACK)	0.5Vrms (high impedance)
SERIAL	
EXTERNAL CONTROL TERMINAL (D-SUB9PIN)	RS-232C COMPATIBLE
SPEAKERS (6Ω)	16W [8 W×8 W] (10 % THD)
	For PSS501/501S only
Dimensions (W×H×D):	47.6” (1210 mm)28.5” (724mm) 3.9” (98 mm)
Weight (Mass)	approx. 99.2 lbs (main unit only) 45.0 kg
	approx. 1093 lbs (with speakers) 49.6 kg

TOSHIBA CORPORATION
1–1, SHIBAURA 1– CHOME, MINATO – KU, TOKYO 105 – 8001, JAPAN

TOSHIBA

FILE NO. 050-200122

SERVICE MANUAL

PLASMA DISPLAY MONITOR

50WP16A, 50WP16C
50WP16H, 50WP16R
50WP16EA, 50HP81

PRINTED IN JAPAN Oct.,2001 Ⓟ

13 Block and Schematic Diagrams

13.1. Schematic Diagram Notes

Important Safety Notice

Components identified by ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacture's specified parts.

Notes:

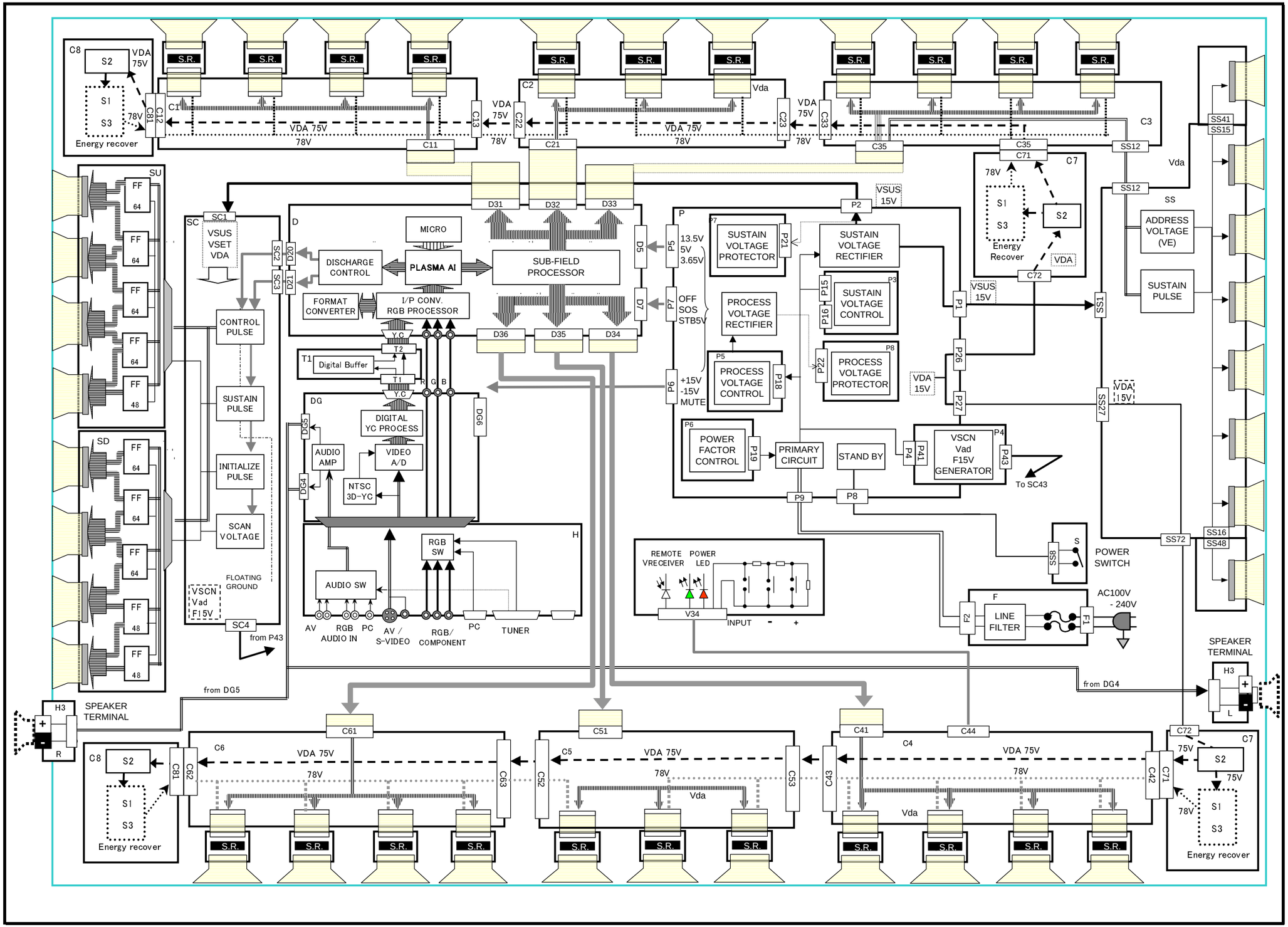
1. **Resistor**
   All resistors are cabon 1/4W resistor, unless marked as follows:
   Unit of resistance is OHM [Ω] (K=1,000, M=1,000,000).
   ◯ : Nonflammable ⊠ : Metal Oxide
   △ : Solid ◎ : Metal Film
   ⊿ : Wire Wound ⊗ : Fuse**:**
2. **Capacitor**
   All capacitors are ceramic 50V capacitor, unless marked as follows:
   Unit of capacitance is μF, unless otherwise noted.
   ⊗ : Temperature Compensation : Electrolytic
   Ⓜ : Polyester NP : Bipolar
   ⓜ : Metalized Polyester Ⓣ : Dipped Tantalum
   ⊠ : Polypropylene Ⓩ : Z-Type
3. Coil
   Unit of inductance is μF, unless otherwise noted.
4. Test Point
   ⚲ : Test Point position
5. Earth Symbol
   ⏚ : Chassis Earth (Cold) ⏚ : Line Earth (Hot)
6. Voltage Measurement
   Voltage is measured by a DC voltmeter.
   Conditions of the measurement are the following:
   Power Source ..... AC 220V-240V, 50/60Hz
   (A, B and E Version)
   AC 120V, 50/60Hz (U Version)
   Receiving Signal ..... Colour Bar signal (RF)
   All customer's controls ..... Maximum positions
7. Number in red circle indicates waveform nember.
   (See waveform pattern table.)
8. When arrow mark (↗) is found, connection is easily found from the direction of arrow

9. Indicates the major signal flow. : Video ➡ Audio ⇨
10. This schematic diagram is the latest at the time of printing and subject to change without

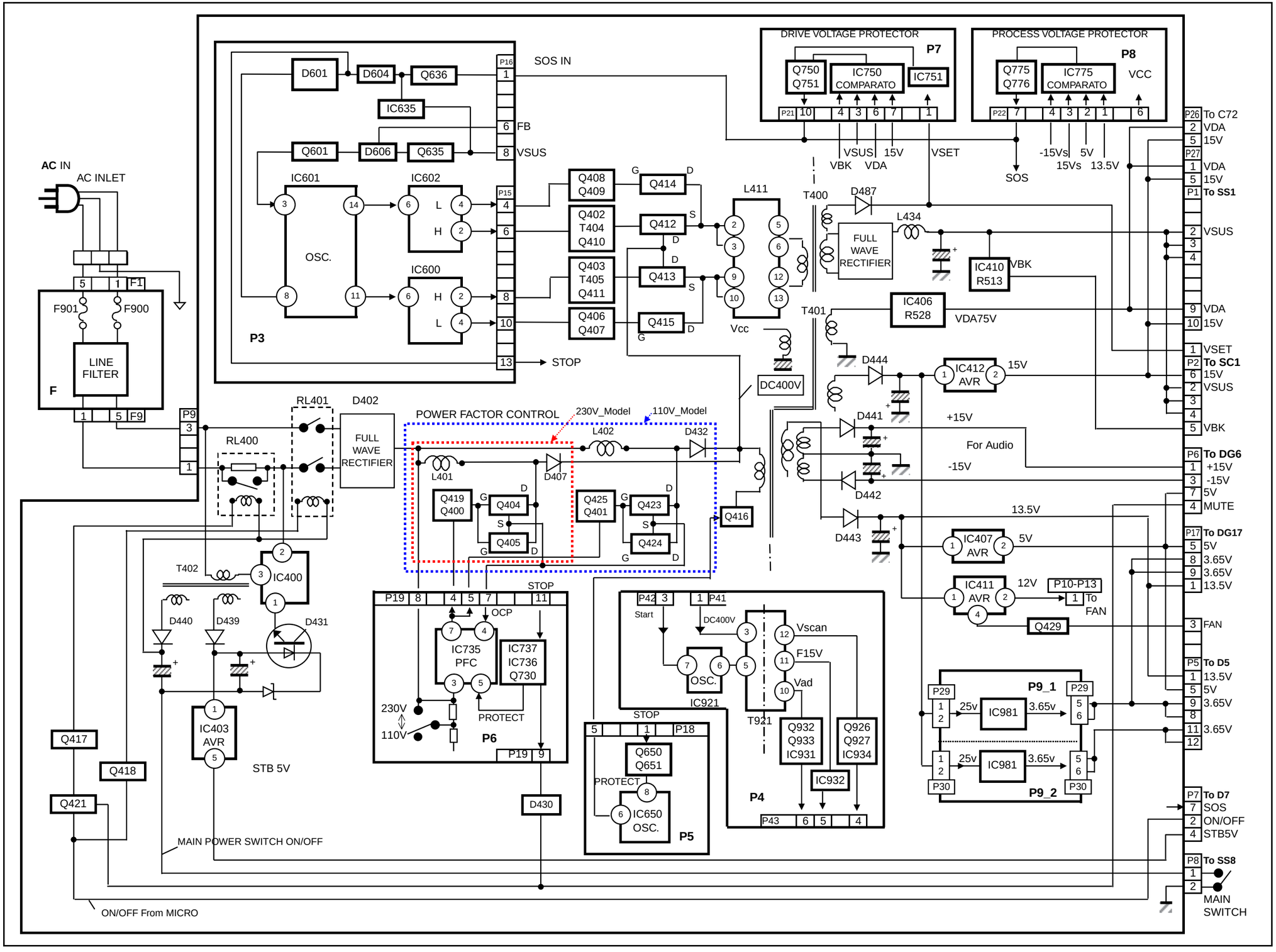
Remarks:

1. The Power Circuit contains a circuit area which uses a separate power supply to isolate the earth connection.
   The circuit is defined by HOT and COLD indications in the schematic diagram. Take the follwing precautions.
   All circuits, except the Power Circuit, are cold.
   Precautions
   a. Do not touch the hot part or the hot and cold parts at the same time or you may be shocked.
   b. Do not short- circuit the hot and cold circuits or a fuse may blow and parts may break.
   c. Do not connect an instrument, such as an oscilloscope, to the hot and cold circuits simultaneously or a fuse may blow.
   Connect the earth of instruments to the earth connection of the circuit being measured.
   d. Make sure to disconnect the power plug before removing the chassis.
2. Following diodes are interchangeable.
   MA150- MA162 (Replacement part)

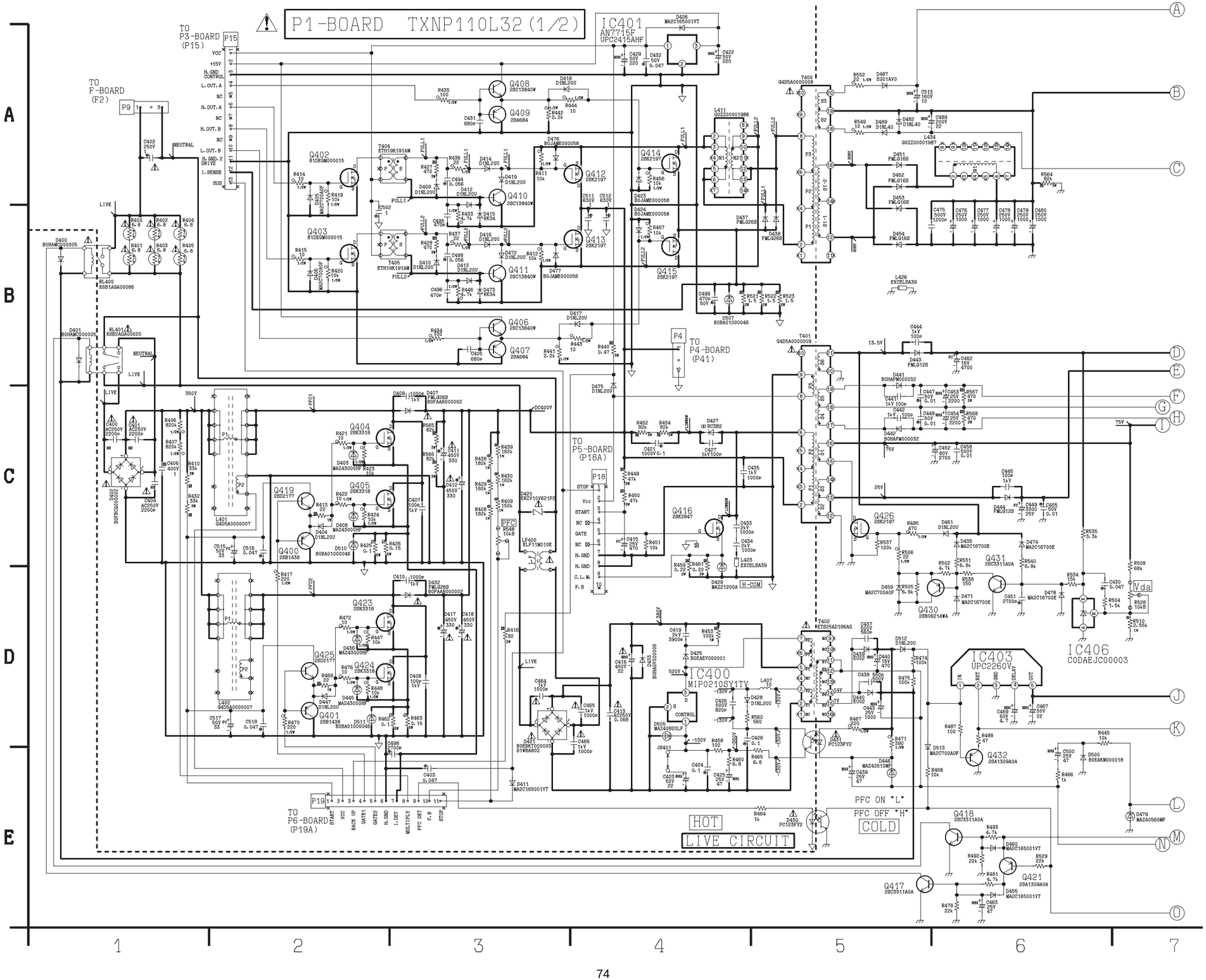
13.2. Main Block Diagram



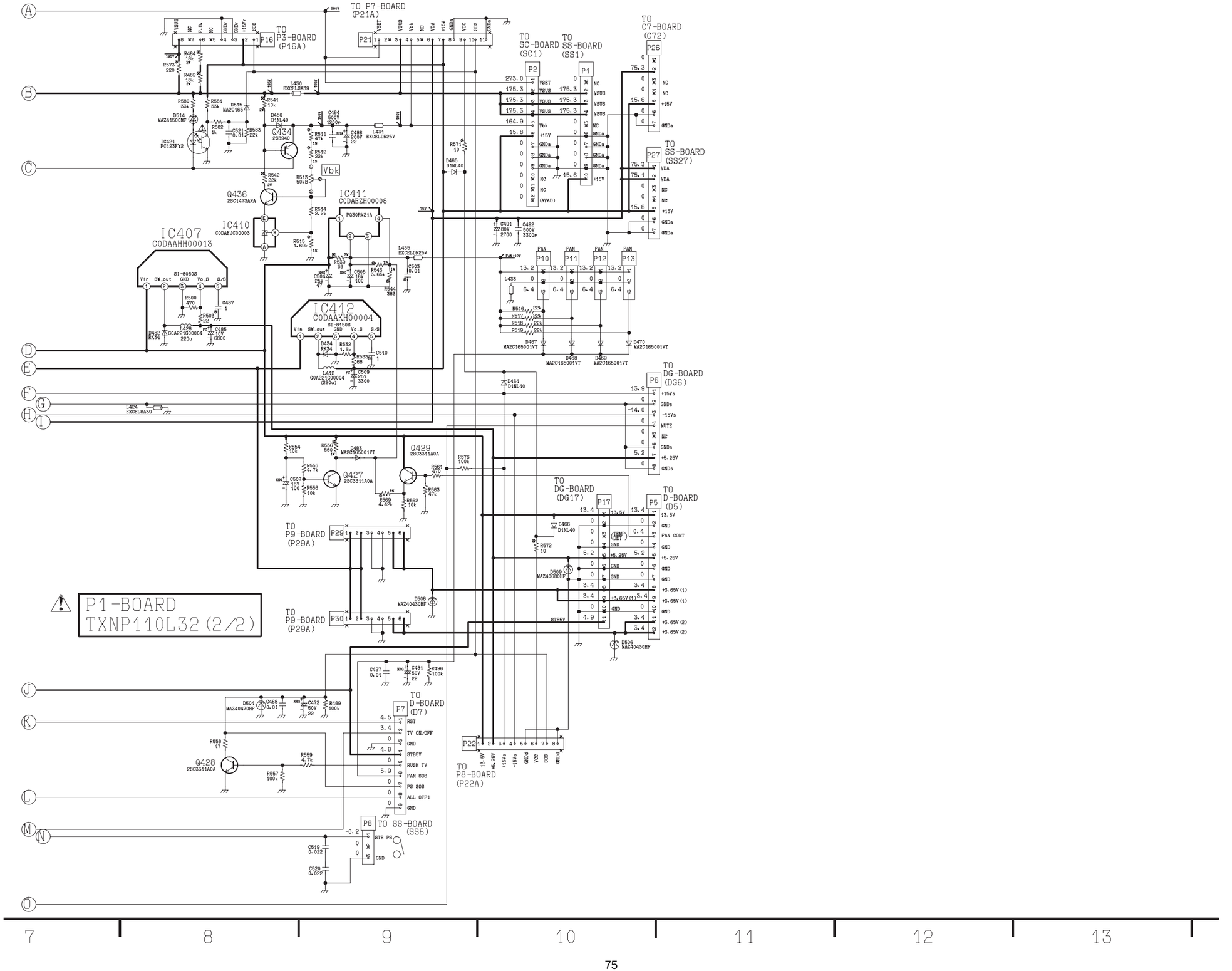
13.3. Power (F, P1, P3, P4, P5, P6, P7, P8 and P9 Board) Block Diagram



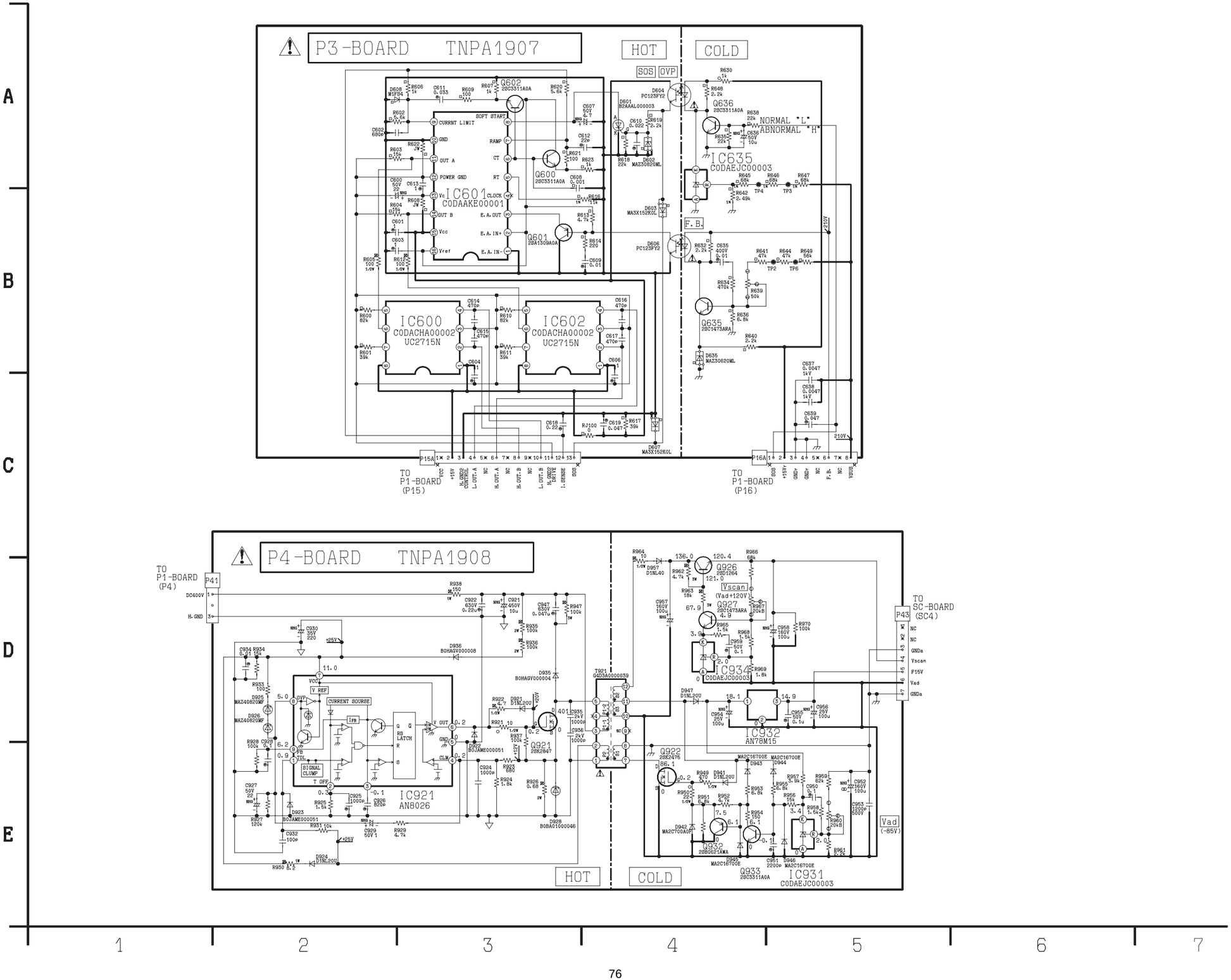
13.4. P1-Board (1/2) Schematic Diagram



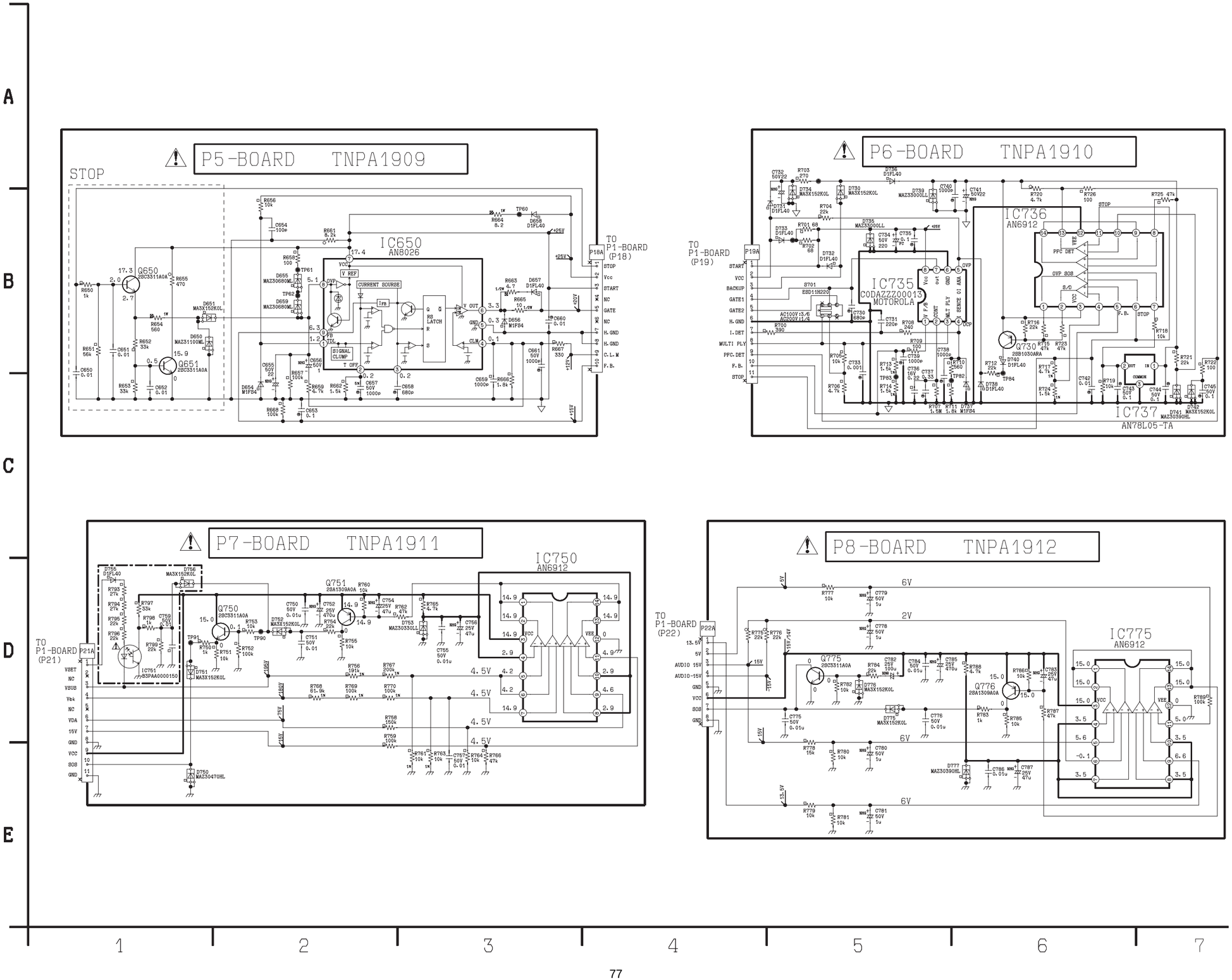
13.5. P1-Board (2/2) Schematic Diagram



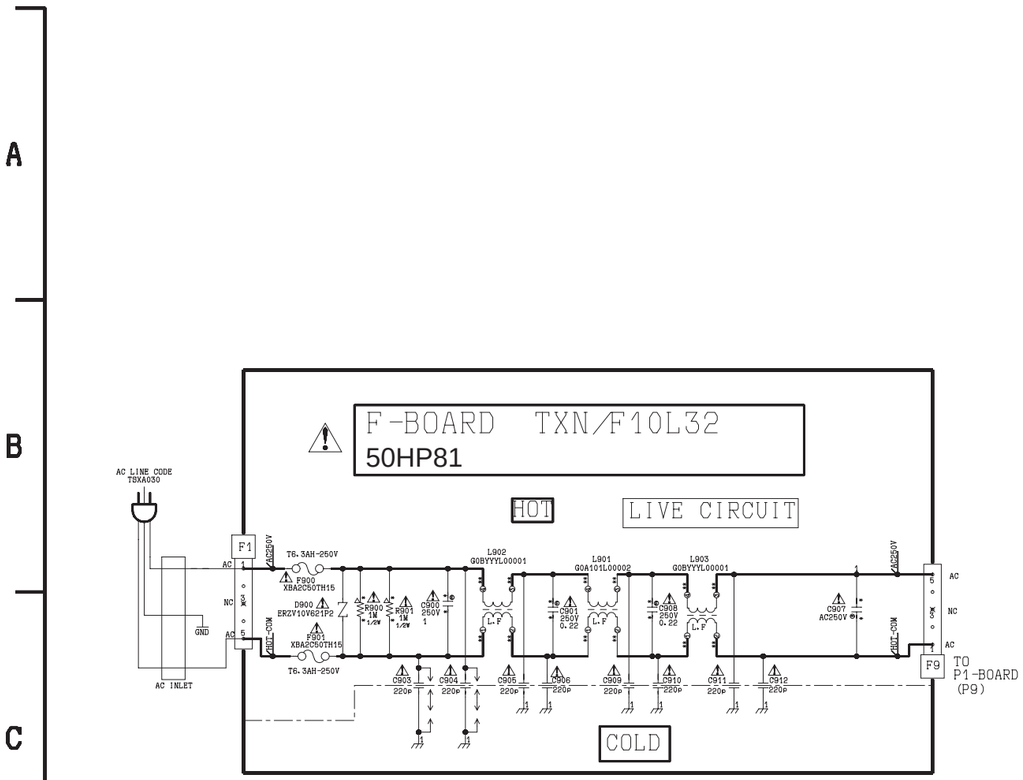
13.6. P3 and P4-Board Schematic Diagram

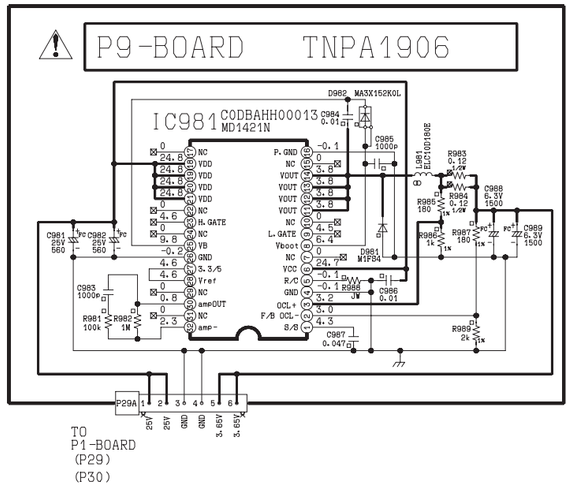

P3-BOARD TNPA1907
HOT
COLD
SOS
OVP
IC601 CODAAKE00001
IC600 CODACHA00002 UC2715N
IC602 CODACHA00002 UC2715N
IC635 CODAEJC00003
IC934 C0DAEJC00003
IC921 AN8026
IC932 AN78M15
IC931 CODAEJC00003
Q602 2SC3311A0A
Q600 2SC3311A0A
Q601 2SA1309A0A
Q636 2SC3311A0A
Q635 2SC1473ARA
Q926 2SD1264
Q927 2SC1473ARA
Q922 2SK2476
Q921 2SK2847
Q932 2SB0621AWA
Q933 2SC3311A0A
NORMAL "L"
ABNORMAL "H"
F.B
Vscan
(Vad+120V)
Vad
(-85V)
TO P1-BOARD (P15)
TO P1-BOARD (P16)
TO P1-BOARD (P4)
TO SC-BOARD (SC4)
P41
P43
P15A
P16A
DC400V
H.GND
NC
GNDa
Yscan
F15V
Vad
GNDa
SOFT START
CURRNT LIMIT
GND
OUT A
POWER GND
Vc
OUT B
Vcc
Vref
RAMP
CT
RT
CLOCK
E.A.OUT
E.A.IN+
E.A.IN-
V REF
CURRENT SOURSE
OVP
FB
SIGNAL CLAMP
T OFF
V OUT
GND
CLAMP
RS LATCH
VCC
+15V
H.GND2
CONTROL
L.OUT-A
H.OUT-A
H.OUT-B
L.OUT-B
H.GND1
I.SENSE
SOS
+15V
GND2
GND1
F.B.
VBOOST
D935 BOHAGV000004
D936 BOHAGV000008
D937 BOJAME000051
D938 BOJAME000051
D939 BOJAME000051
D940 BOJAME000051
D941 D1NL20U
D942 MA2C700A0F
D943 MA2C16700E
D944 MA2C16700E
D945 MA2C16700E
D946 MA2C16700E
D947 D1NL20U
T921 G4D3A0000039
T401 G4D3A0000040
D957 D1NL40
D958 D1NL40
D959 D1NL40
D960 204B
D961 2.4V
D962 4.7k
D963 16k
D964 10
D965 1.5k
D966 68k
D967 20kB
D968 1.5k
D969 1.8k
D970 100k
D971 100k
D972 100k
D973 100k
D974 100k
D975 100k
D976 100k
D977 100k
D978 100k
D979 100k
D980 100k
D981 100k
D982 100k
D983 100k
D984 100k
D985 100k
D986 100k
D987 100k
D988 100k
D989 100k

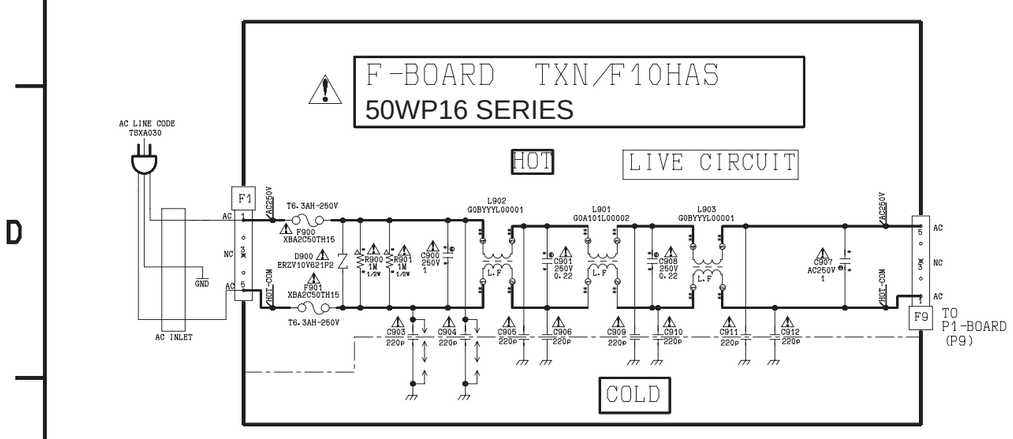
13.7. P5, P6, P7 and P8-Board Schematic Diagram



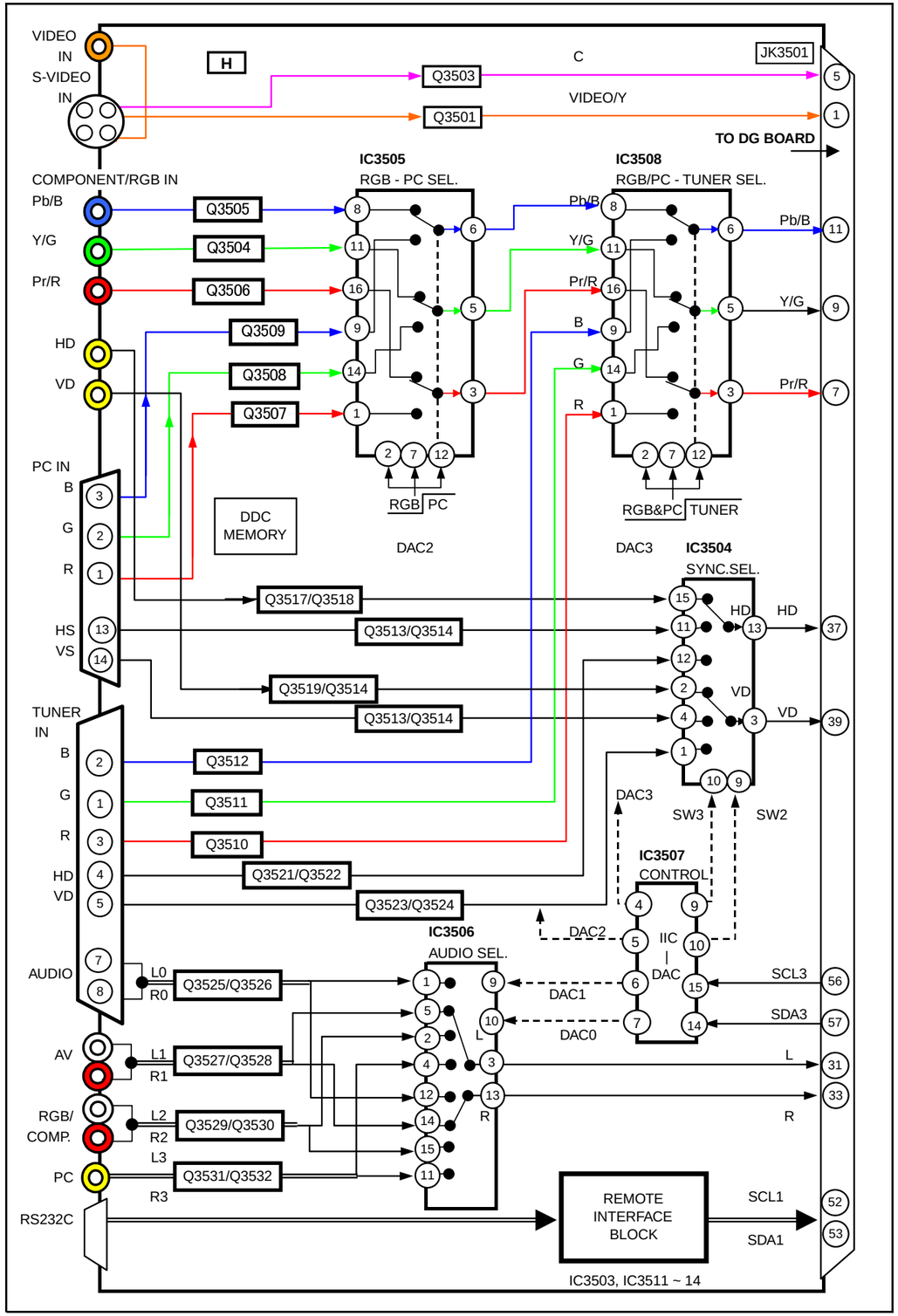
13.8. P9 and F-Board Schematic Diagram



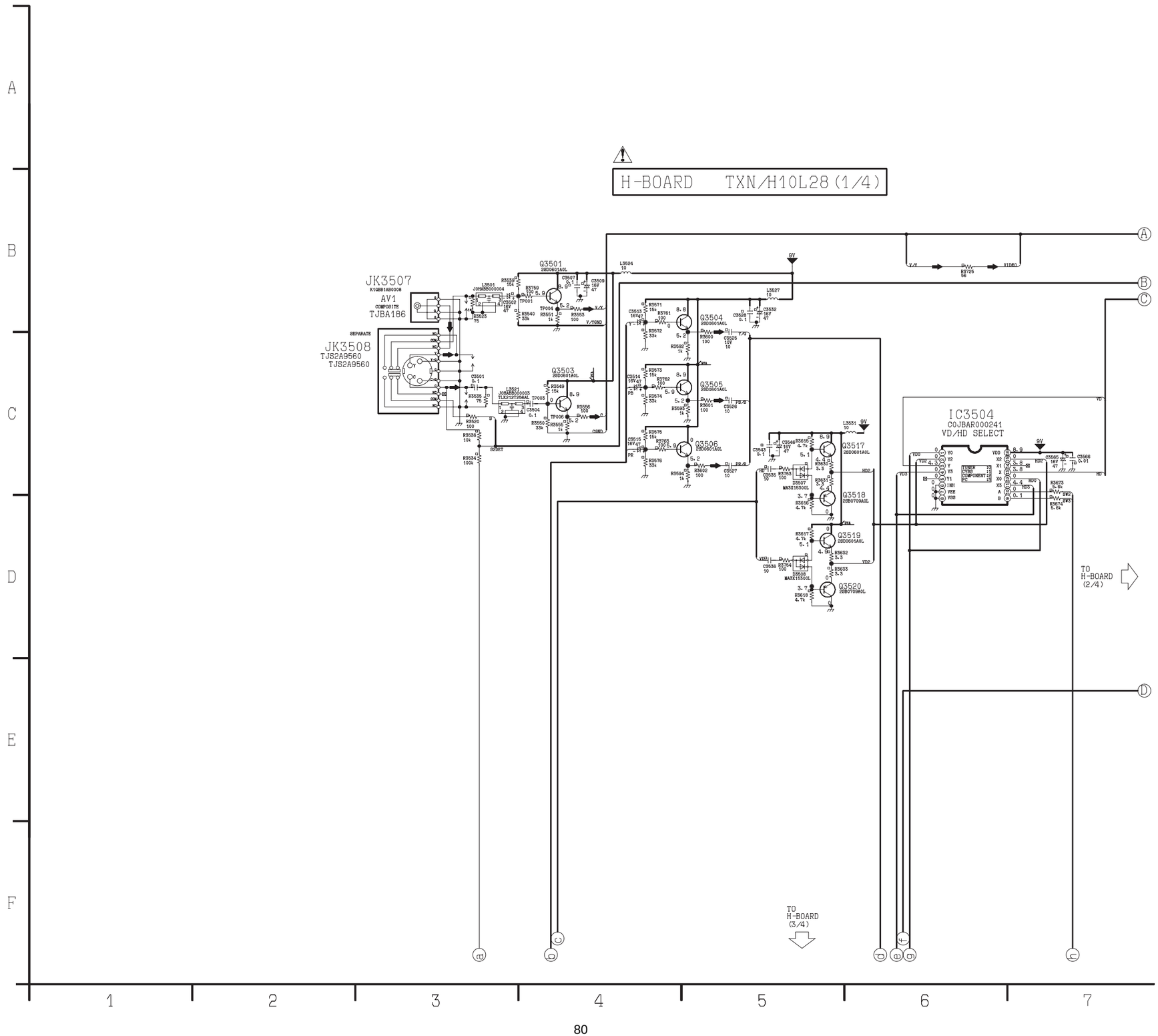




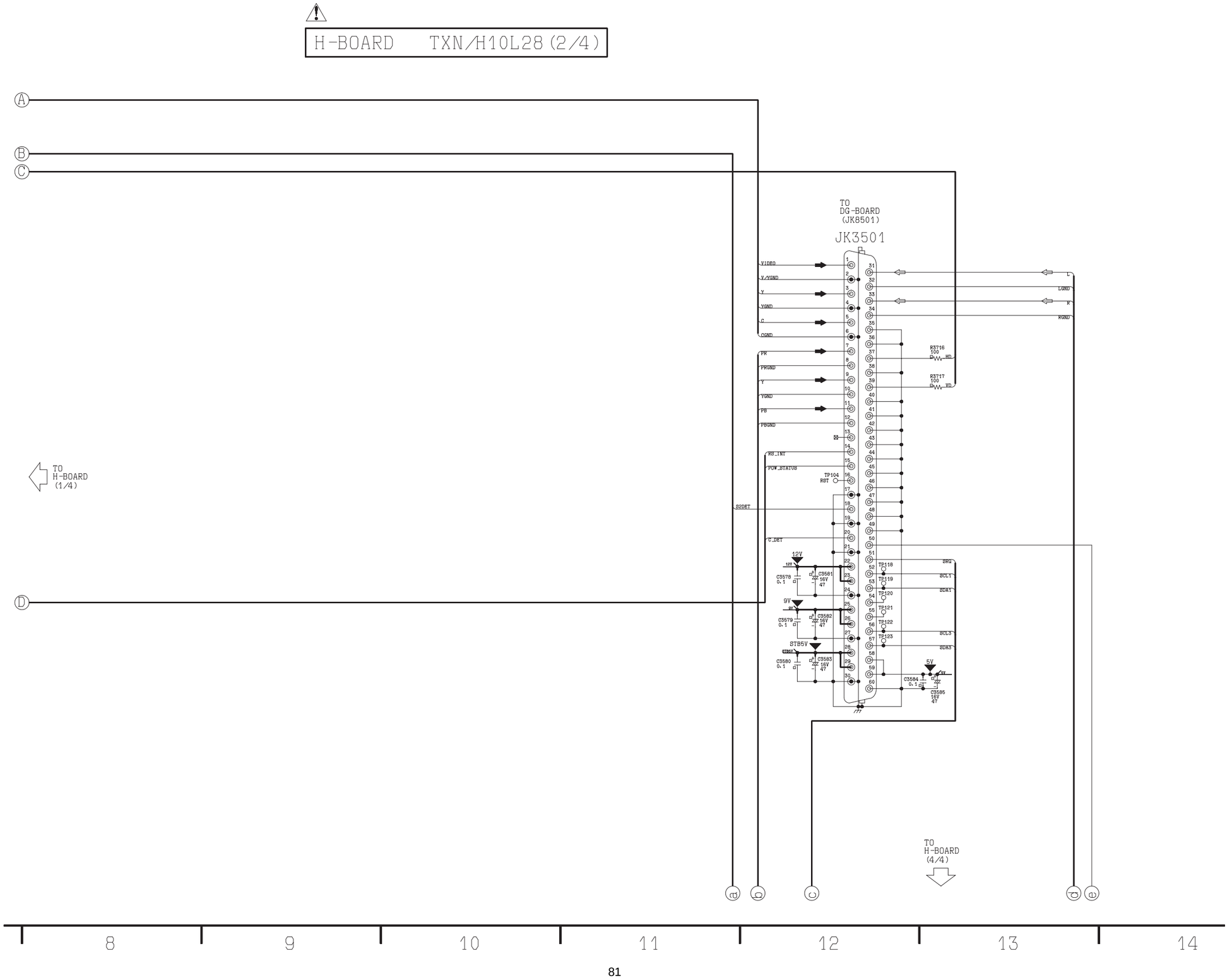
13.9. H-Board Block Diagram



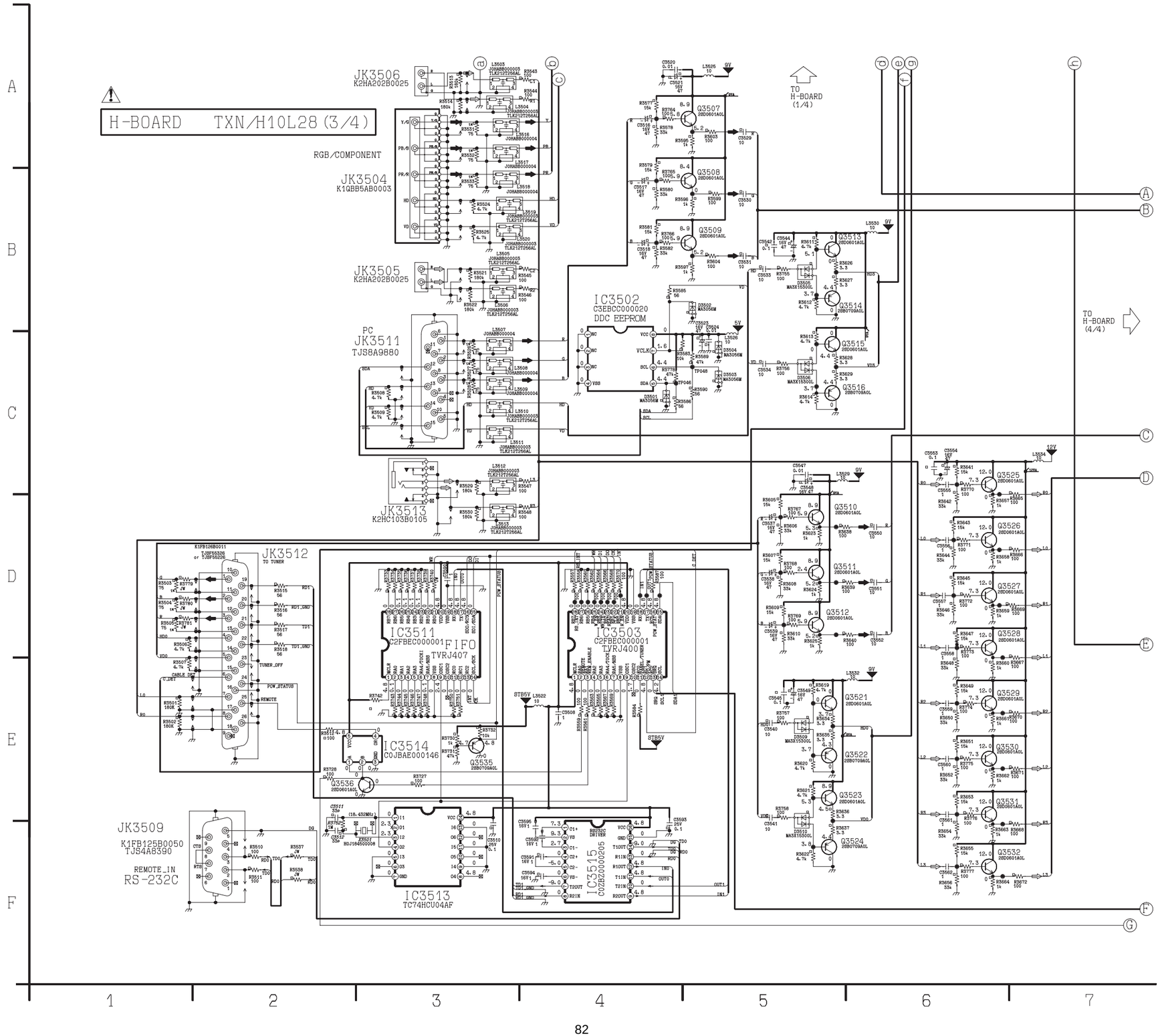
13.10. H-Board (1/4) Schematic Diagram



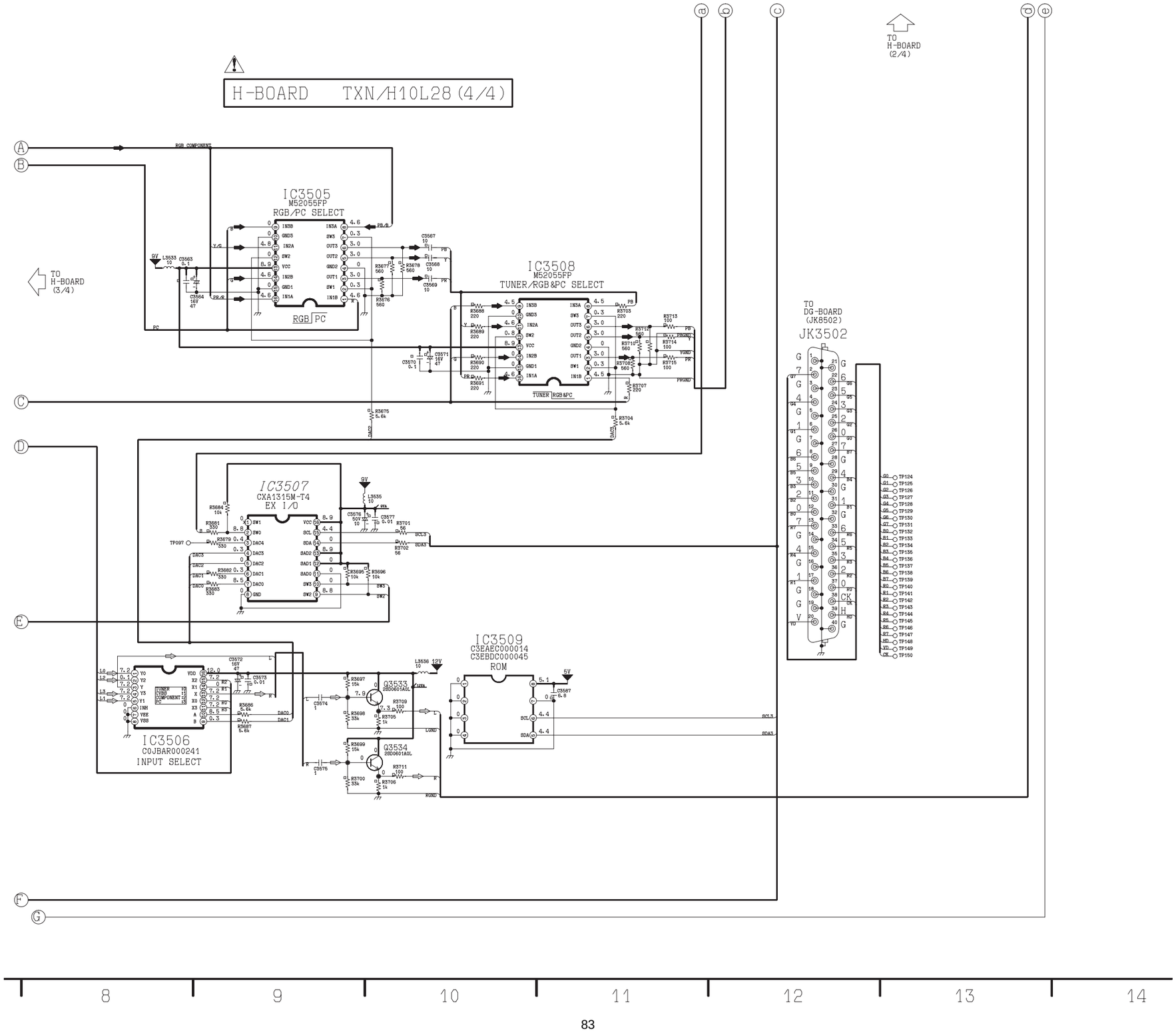
13.11. H-Board (2/4) Schematic Diagram



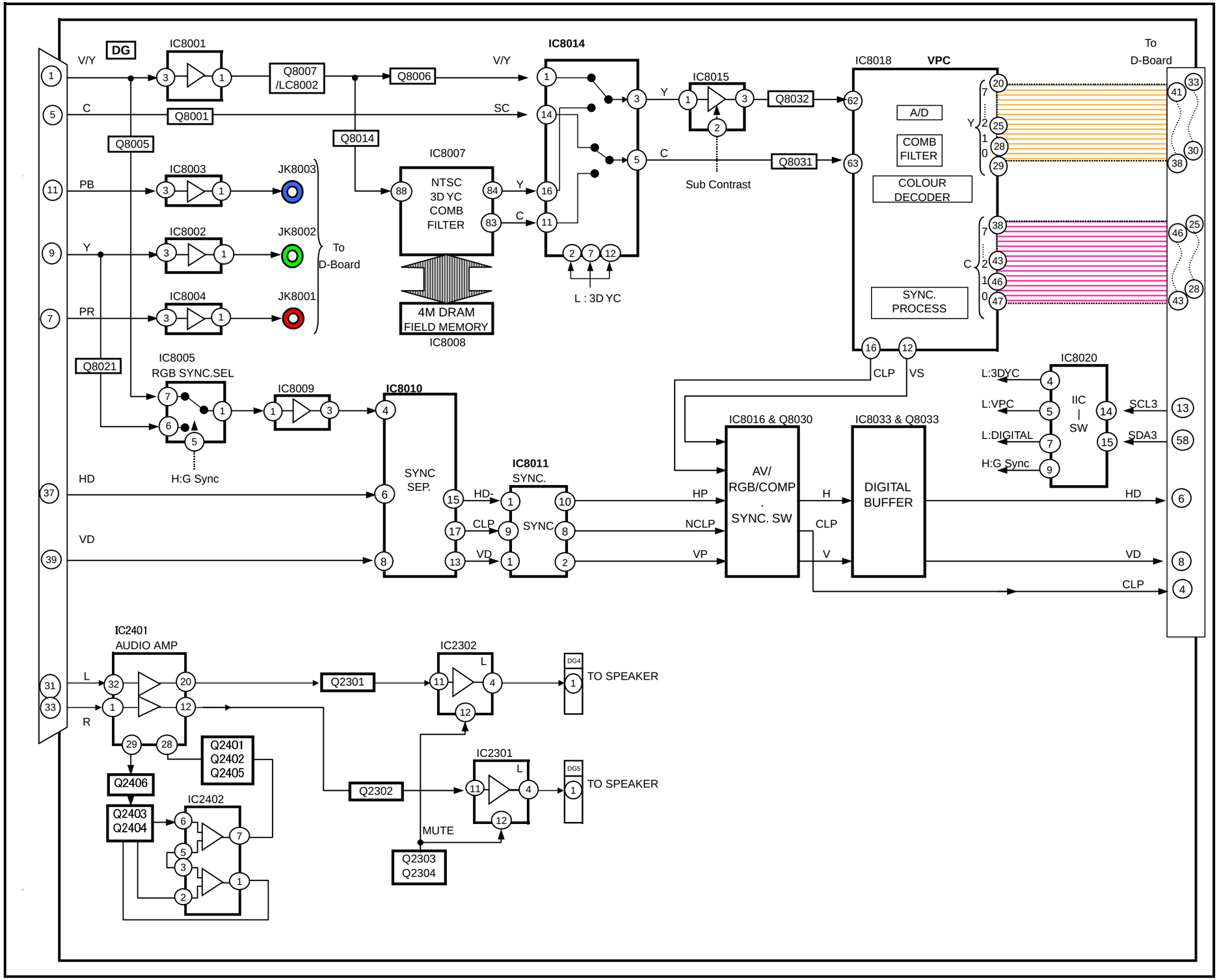
13.12. H-Board (3/4) Schematic Diagram



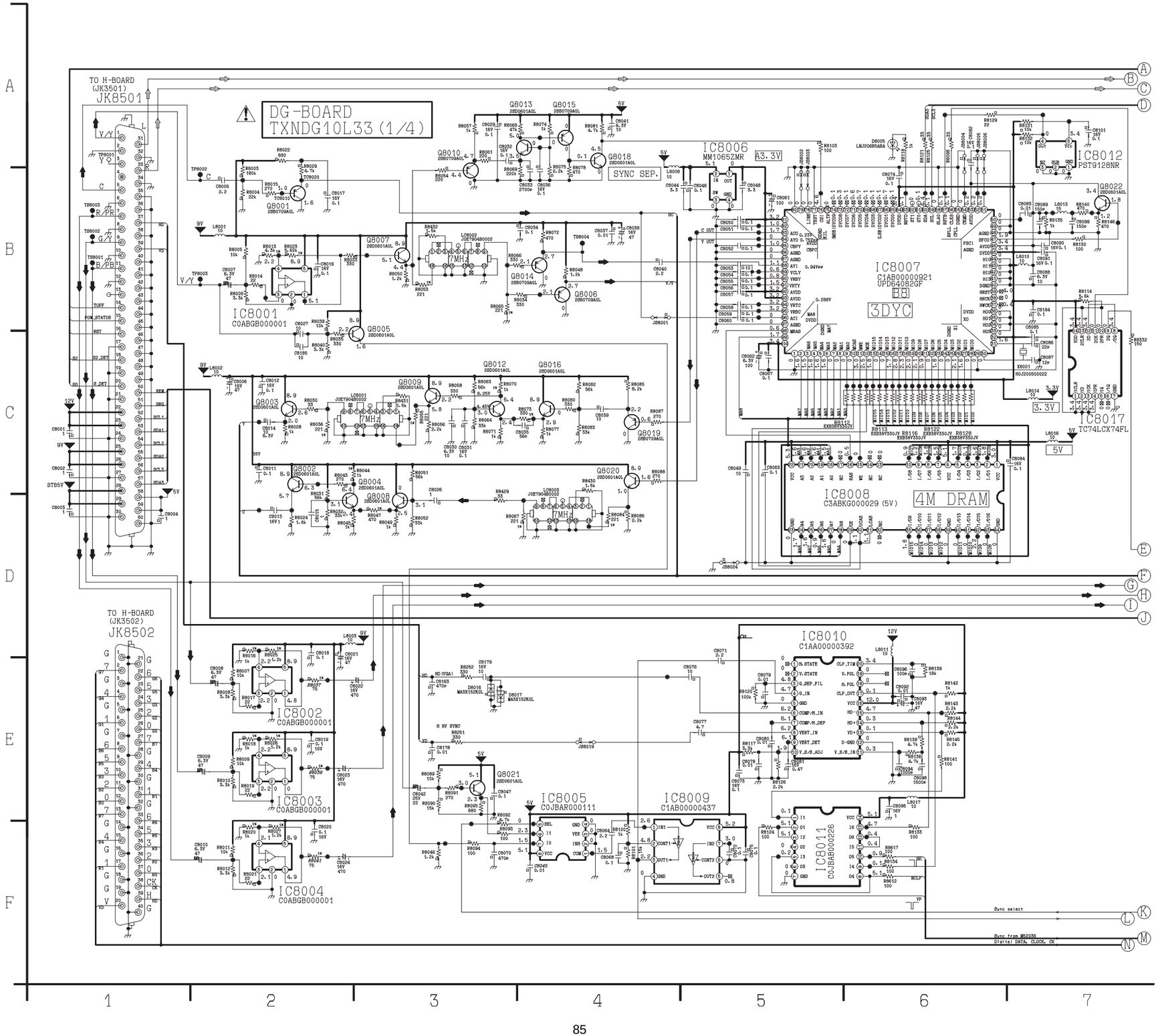
13.13. H-Board (4/4) Schematic Diagram



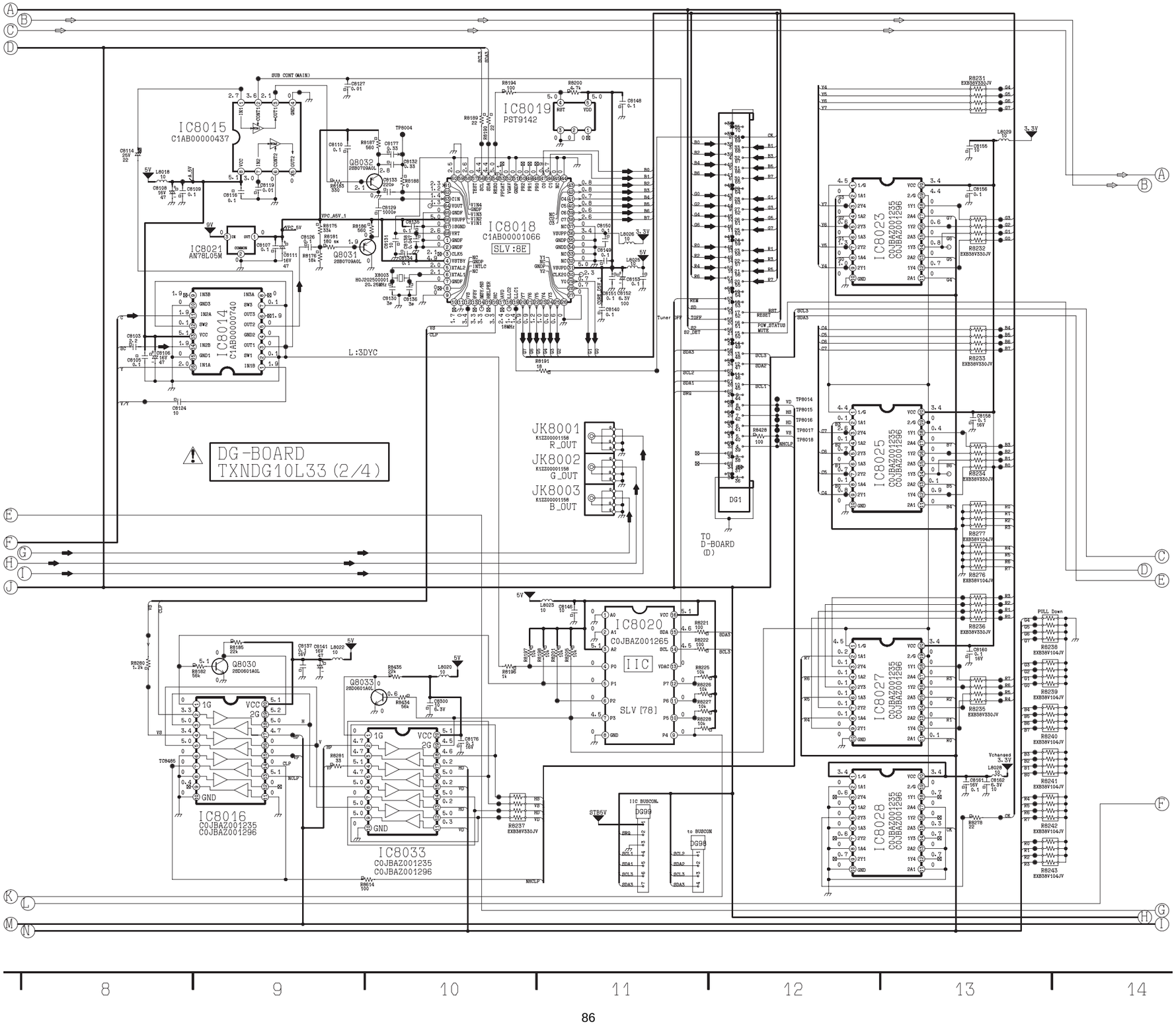
13.14. DG Board Block Diagram



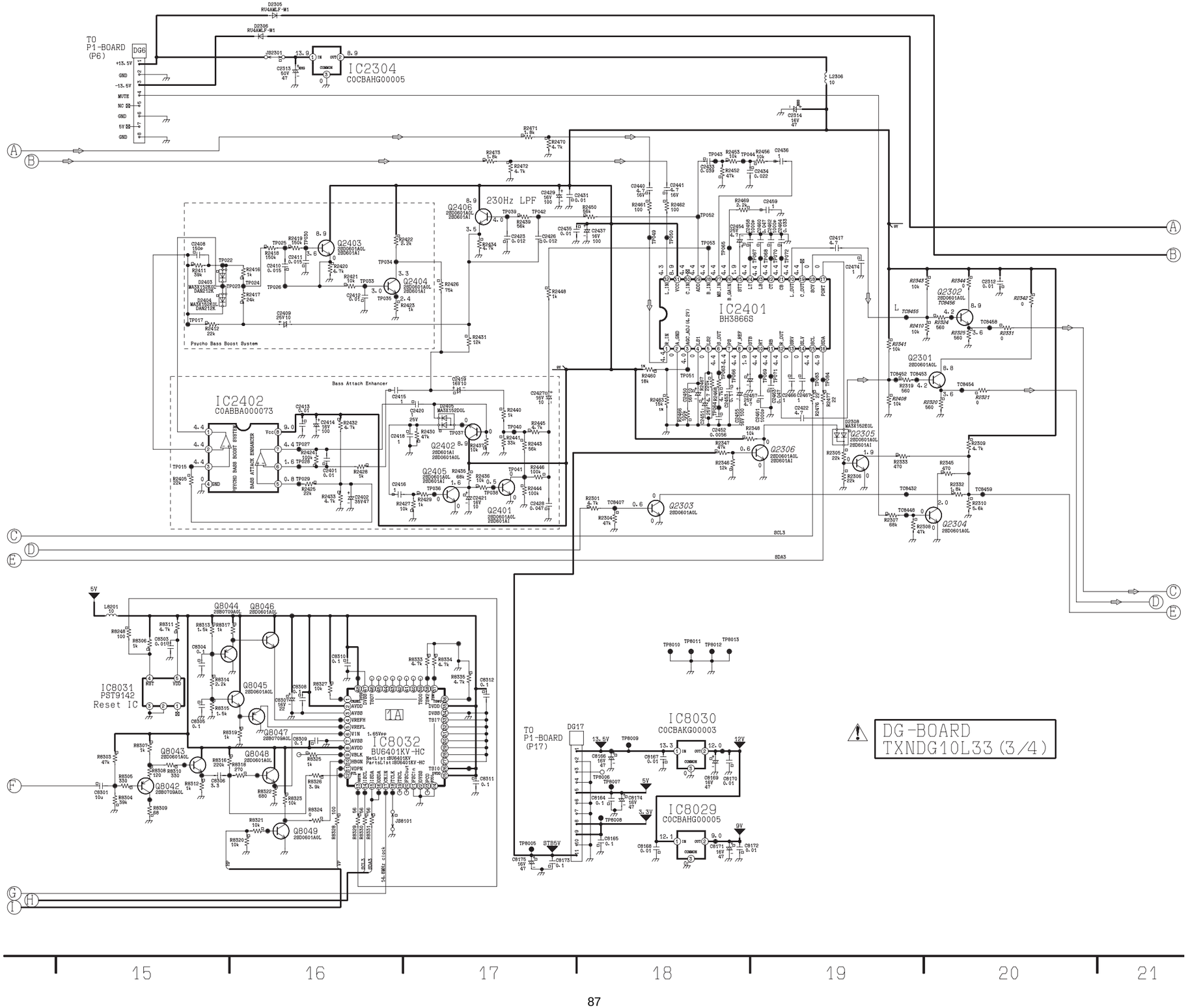
13.15. DG-Board (1/4) Schematic Diagram



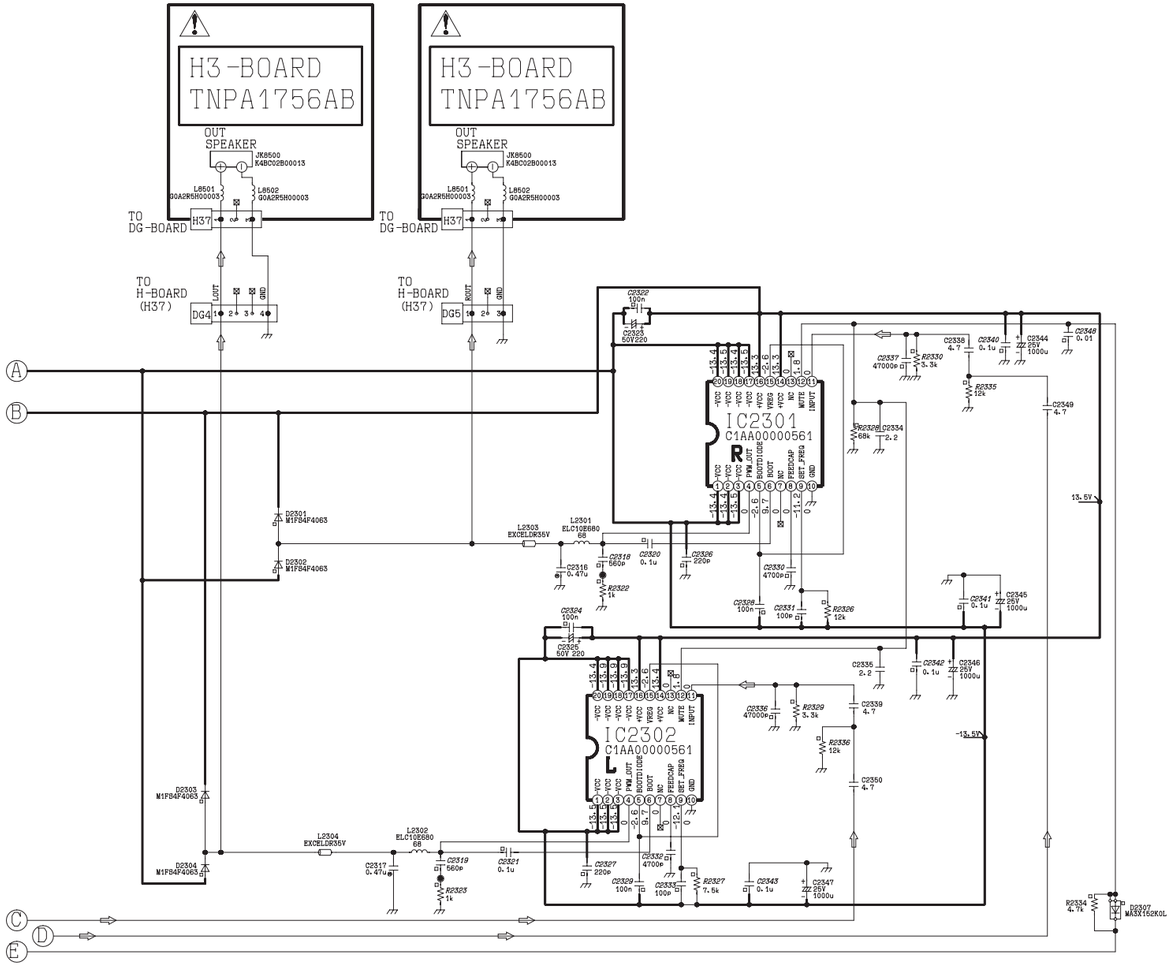
13.16. DG-Board (2/4) Schematic Diagram



13.17. DG-Board (3/4) Schematic Diagram

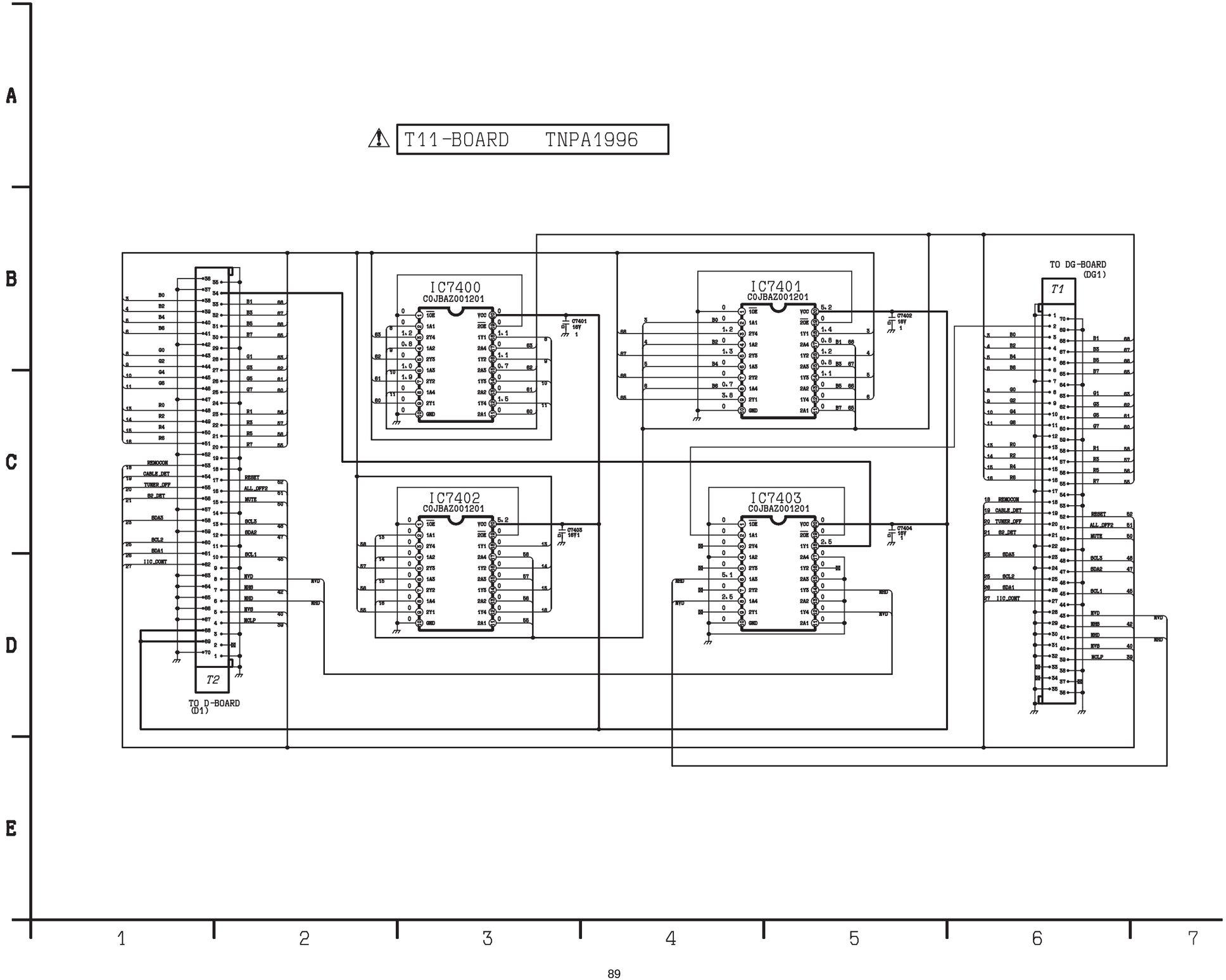


13.18. DG-Board (4/4) Schematic Diagram



DG-BOARD
TXNDG10L33 (4/4)

13.19. T11 Board Schematic Diagram

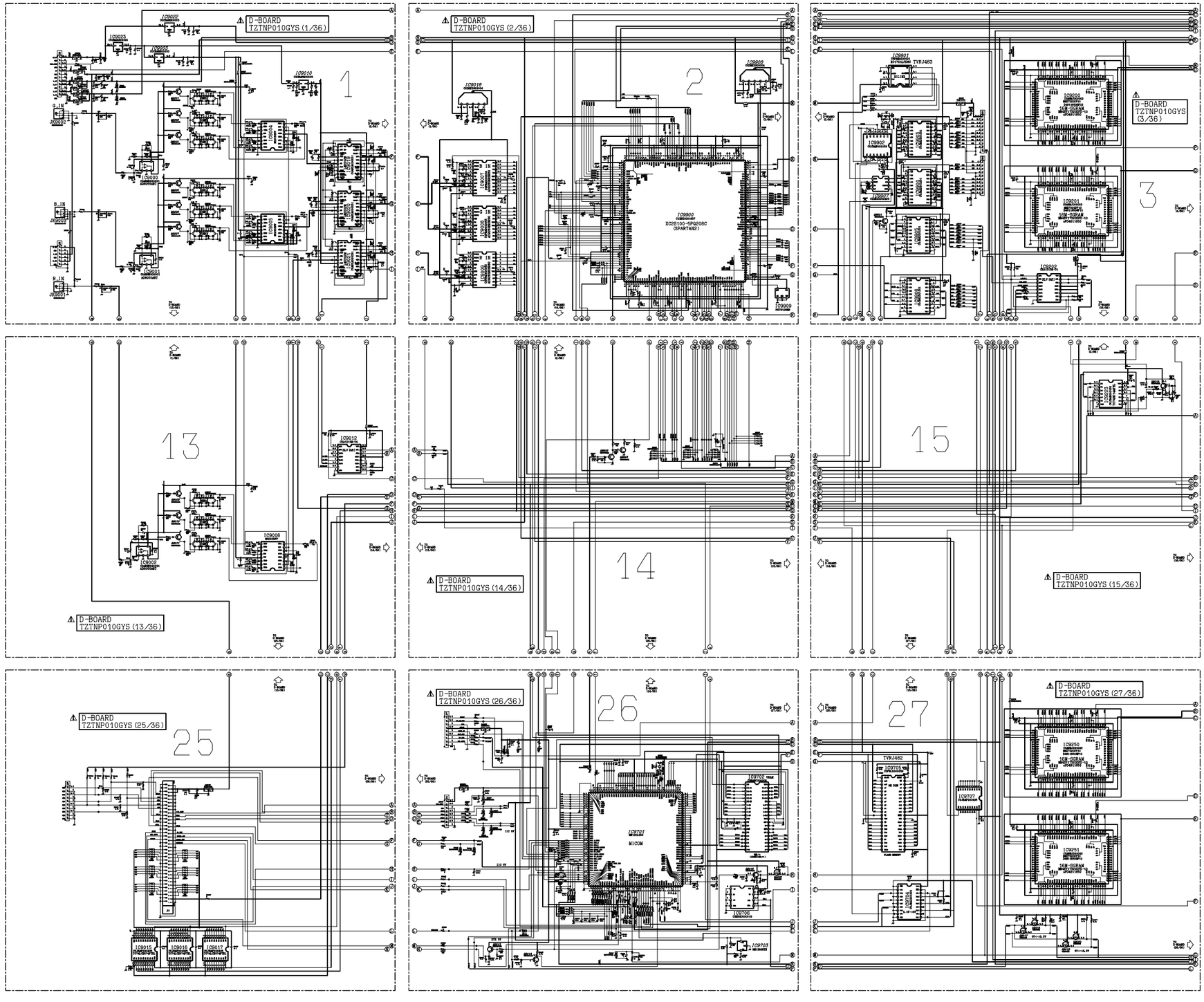


13.20. D-Board IC Location

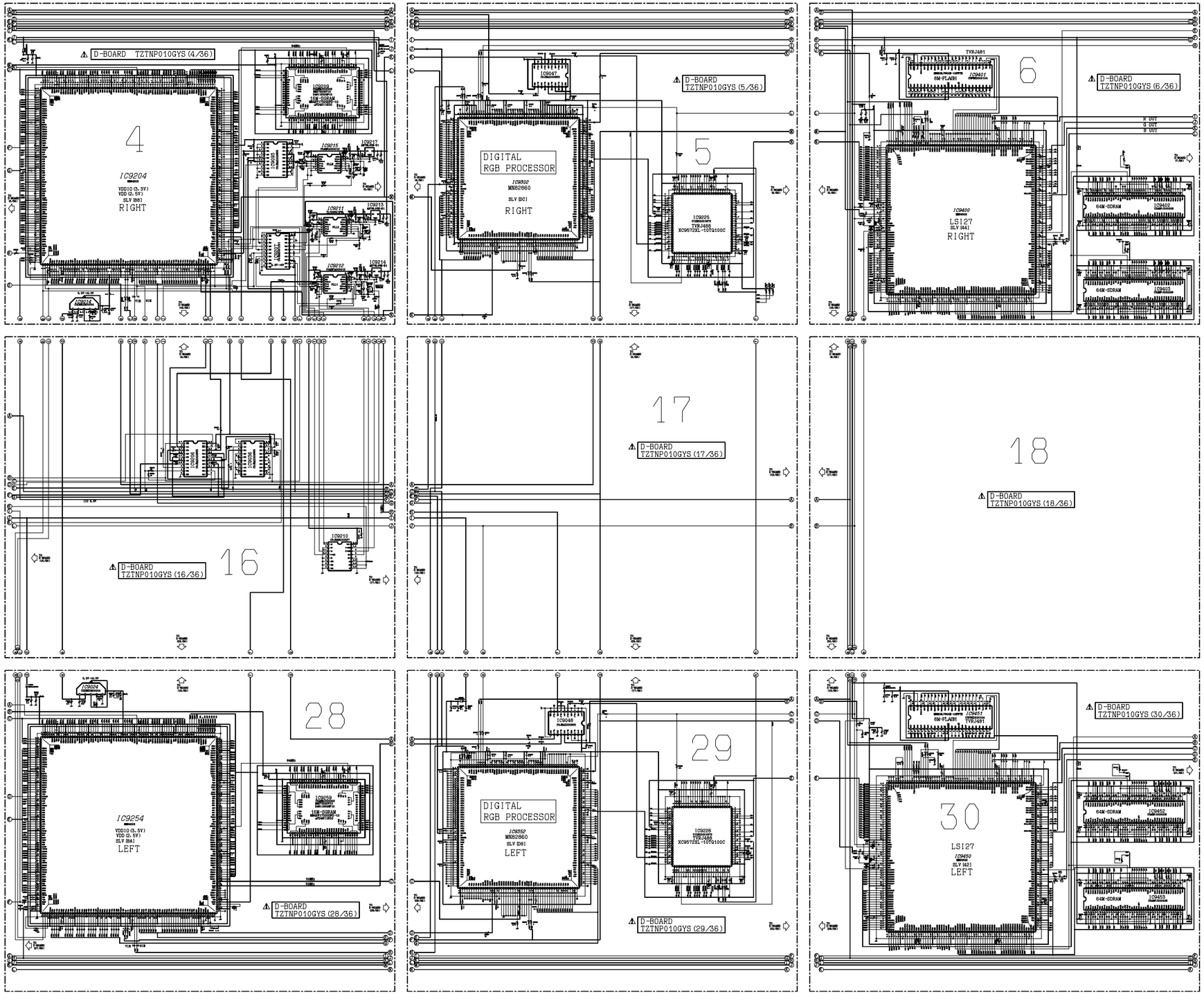
IC No.	*/36	Page
IC9000	1	95
IC9001	1	95
IC9002	13	107
IC9003	1	95
IC9004	1	95
IC9005	1	95
IC9006	13	107
IC9007	2	96
IC9008	2	96
IC9009	2	96
IC9010	1	95
IC9012	13	107
IC9014	4	98
IC9015	25	119
IC9016	25	119
IC9017	25	119
IC9018	2	96
IC9019	1	95
IC9020	1	95
IC9021	1	95
IC9022	1	95
IC9023	1	95
IC9024	28	122
IC9036	16	110
IC9047	5	99
IC9048	29	123
IC9061	7	101
IC9093	4	98
IC9200	3	97
IC9201	3	97
IC9202	3	97
IC9204	4	98
IC9206	16	110
IC9207	4	98
IC9209	4	98
IC9210	16	110
IC9211	4	98
IC9211	4	98
IC9212	4	98
IC9213	4	98
IC9214	4	98
IC9215	4	98
IC9217	4	98
IC9223	15	109
IC9225	5	99
IC9226	29	123
IC9250	27	121
IC9251	27	121
IC9254	28	122
IC9259	28	122
IC9302	5	99
IC9352	29	123
IC9400	6	100
IC9401	6	100
IC9401	6	100
IC9402	6	100
IC9403	6	100
IC9450	30	124
IC9451	30	124
IC9452	30	124
IC9453	30	124
IC9501	22	116

IC No.	*/36	Page
IC9502	23	117
IC9503	10	104
IC9504	11	105
IC9505	35	129
IC9506	34	128
IC9507	23	117
IC9508	23	117
IC9509	23	117
IC9510	23	117
IC9511	23	117
IC9512	24	118
IC9513	24	118
IC9516	21	115
IC9520	10	104
IC9521	34	128
IC9551	19	113
IC9552	8	102
IC9554	8	102
IC9555	32	126
IC9557	20	114
IC9558	8	102
IC9559	20	114
IC9560	8	102
IC9561	20	114
IC9562	21	115
IC9563	21	115
IC9564	21	115
IC9565	21	115
IC9701	26	120
IC9702	26	120
IC9703	26	120
IC9704	27	121
IC9705	27	121
IC9706	26	120
IC9707	27	121
IC9900	2	96
IC9901	3	97
IC9902	3	97
IC9903	3	97
IC9904	3	97
IC9905	3	97
IC9906	3	97
IC9907	3	97
IC9908	2	96
IC9909	2	96

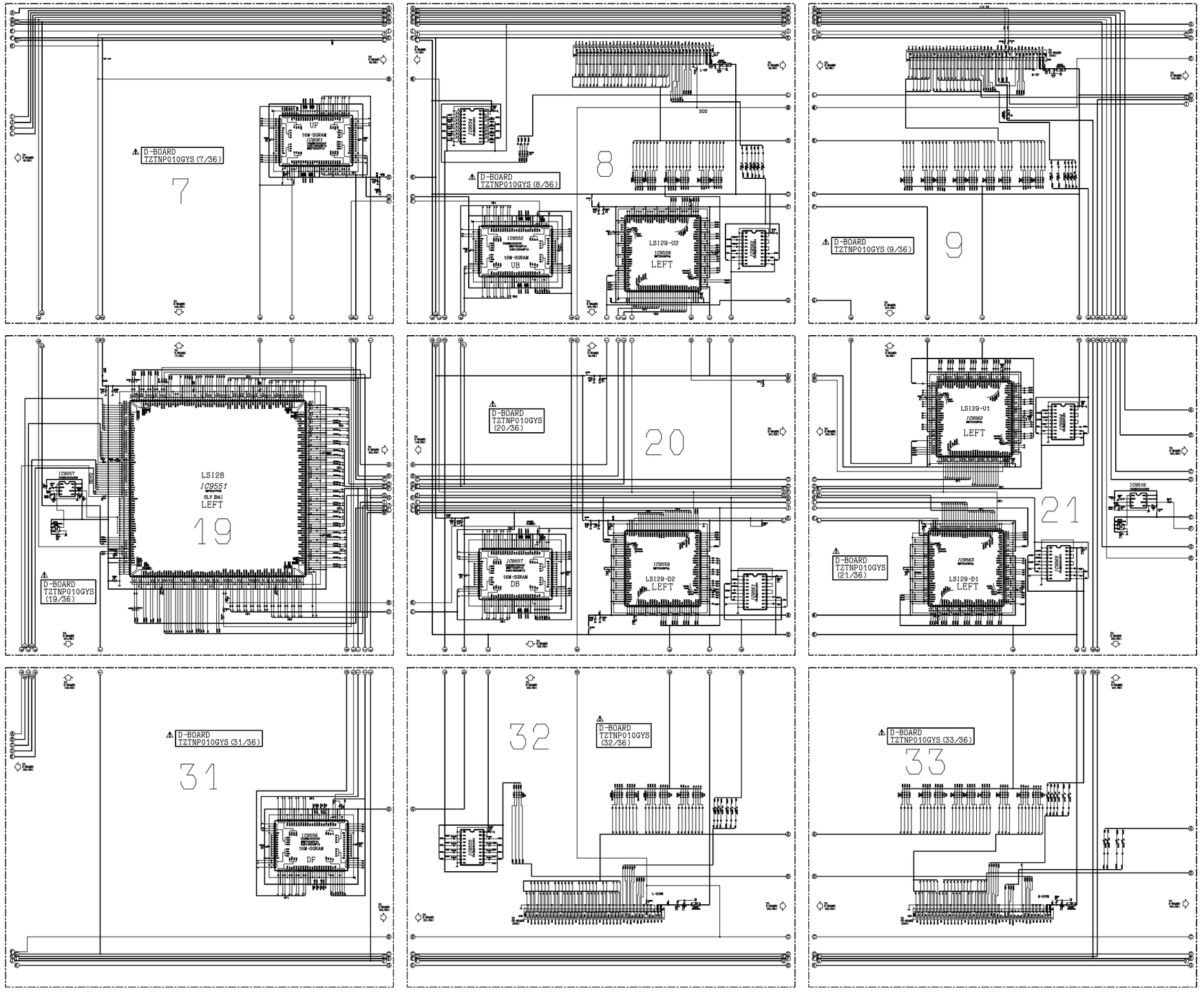
13.21. D-Board Information (1/4)



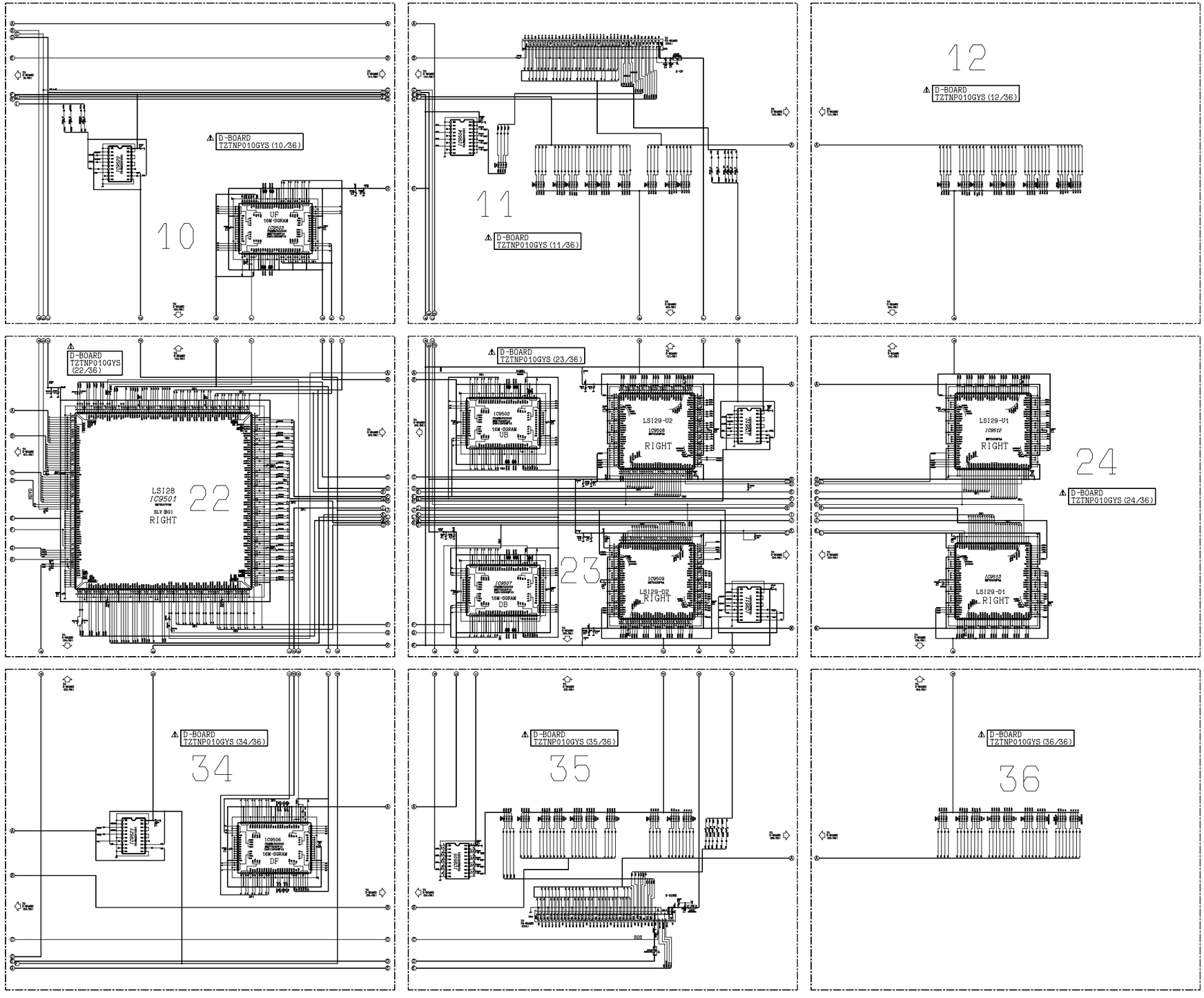
13.22. D-Board Information (2/4)



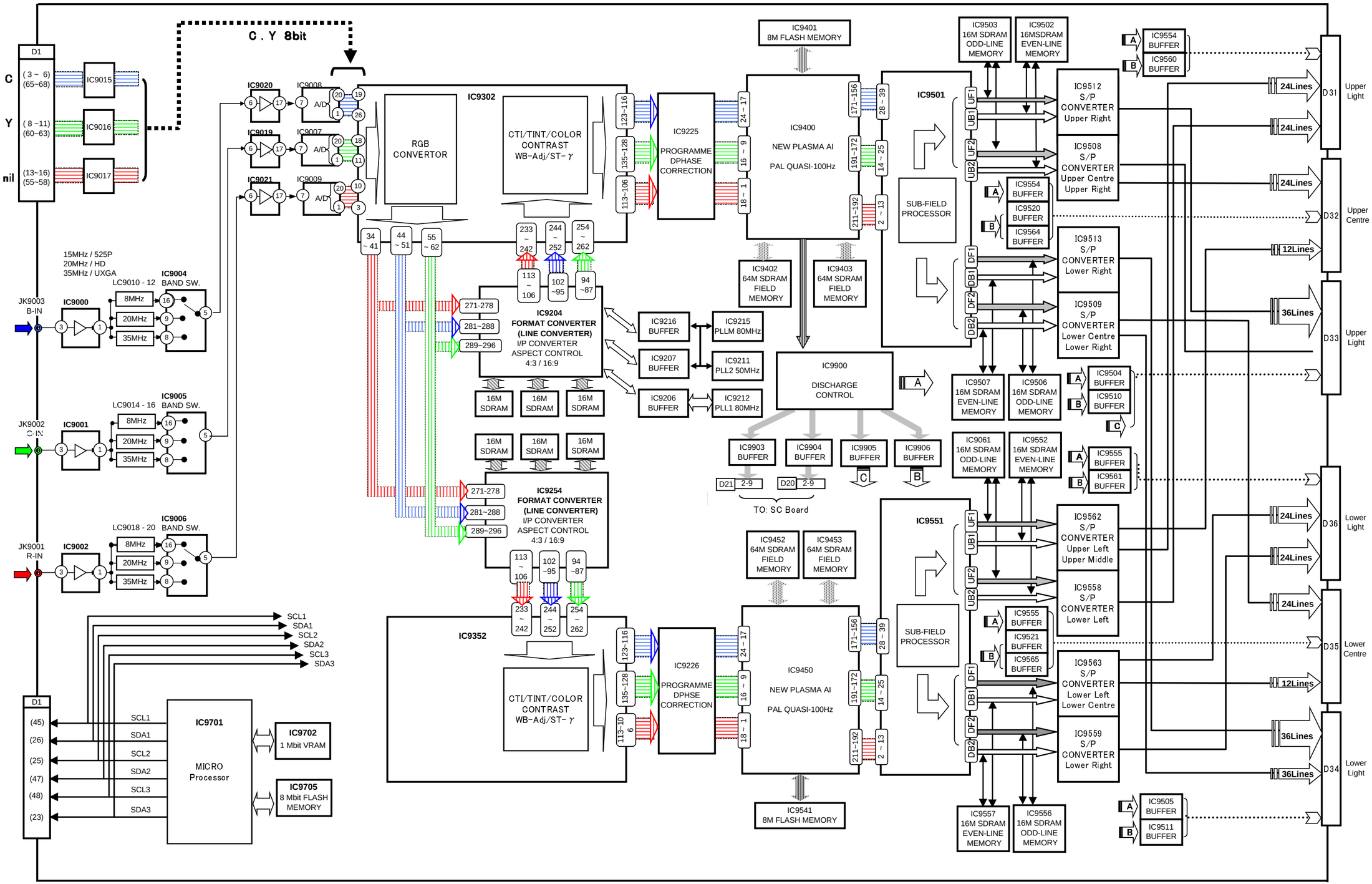
13.23. D-Board Information (3/4)



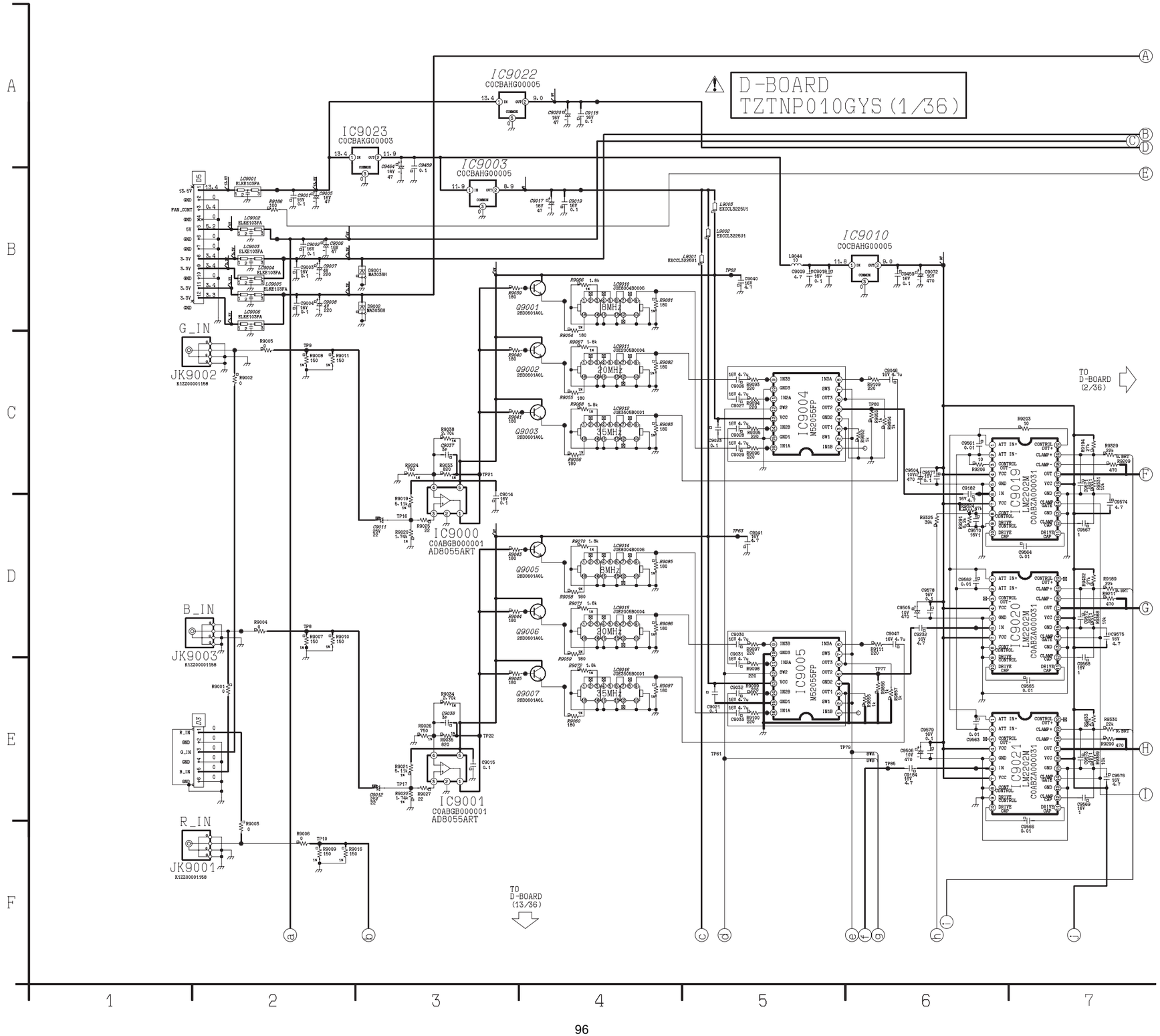
13.24. D-Board Information (4/4)



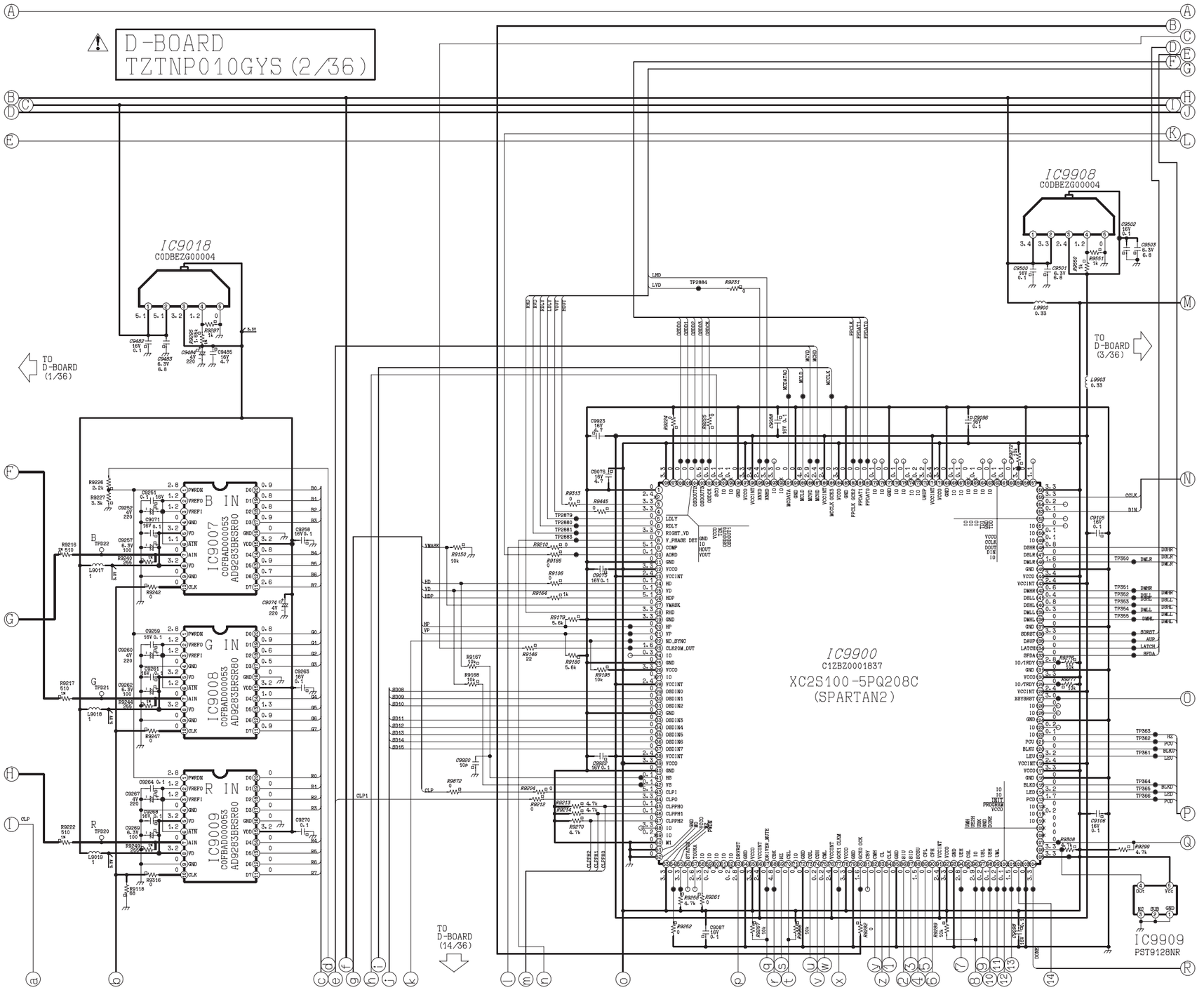
13.25. D-Board Block Diagram



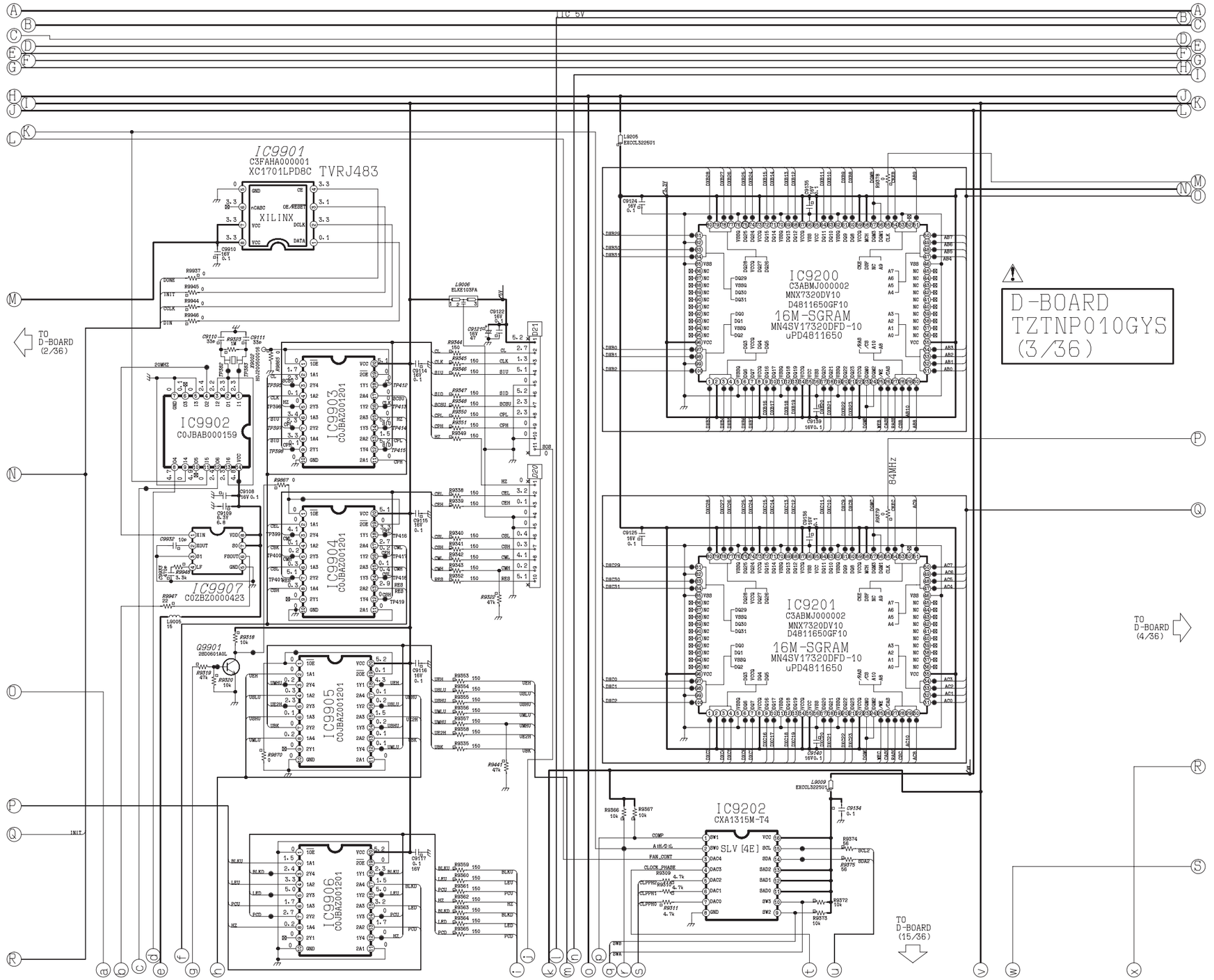
13.26. D-Board (1/36) Schematic Diagram



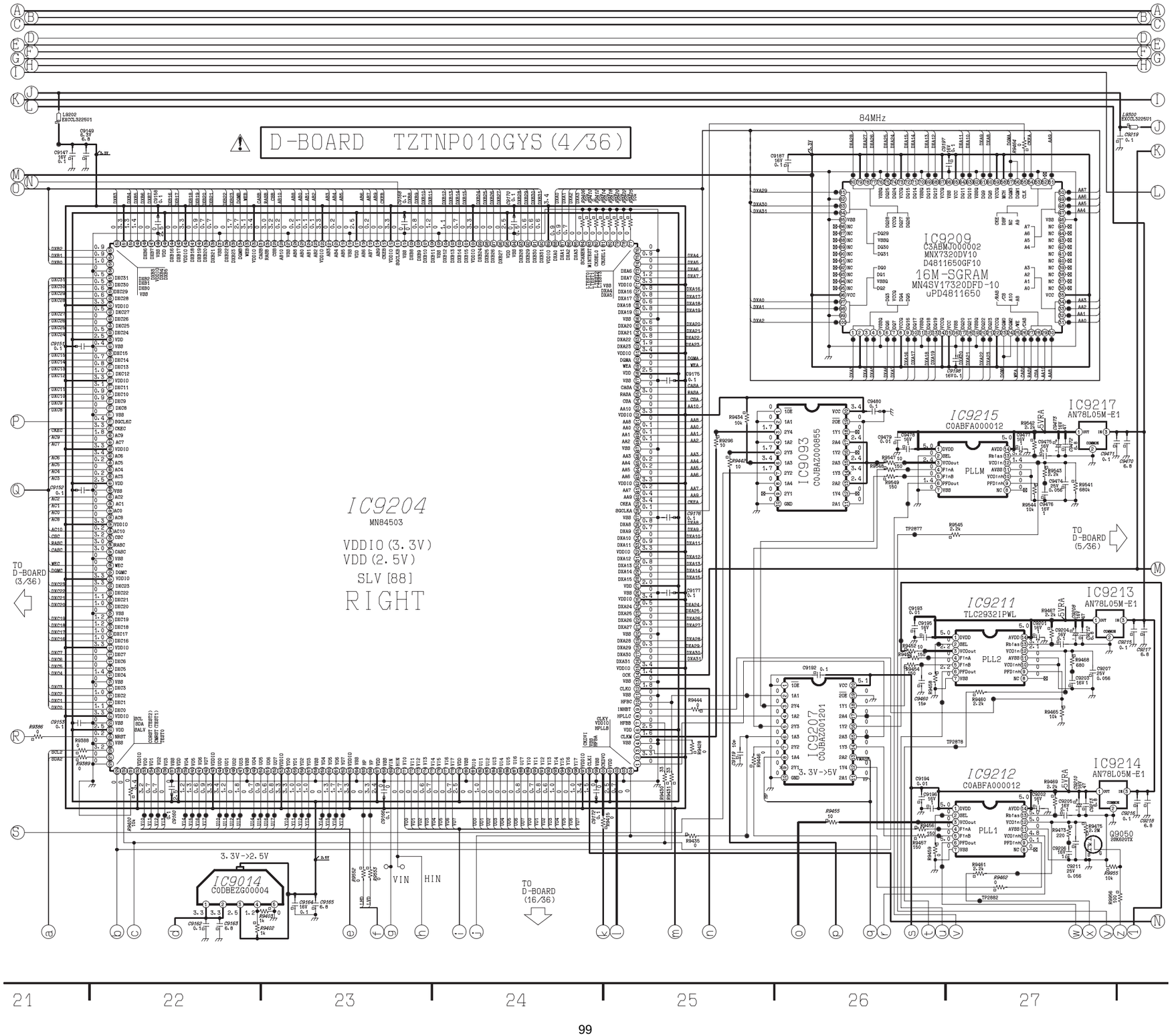
13.27. D-Board (2/36) Schematic Diagram



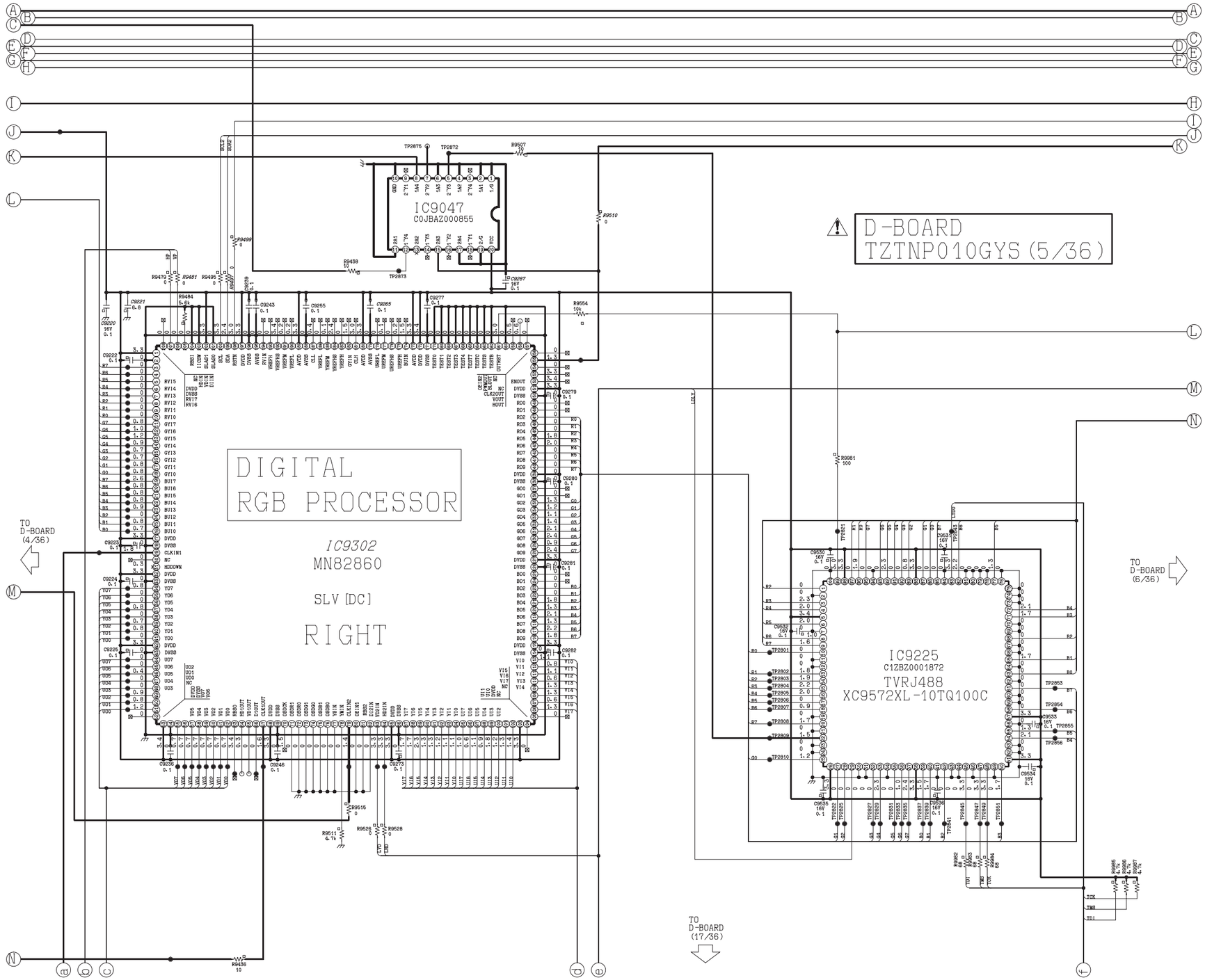
13.28. D-Board (3/36) Schematic Diagram



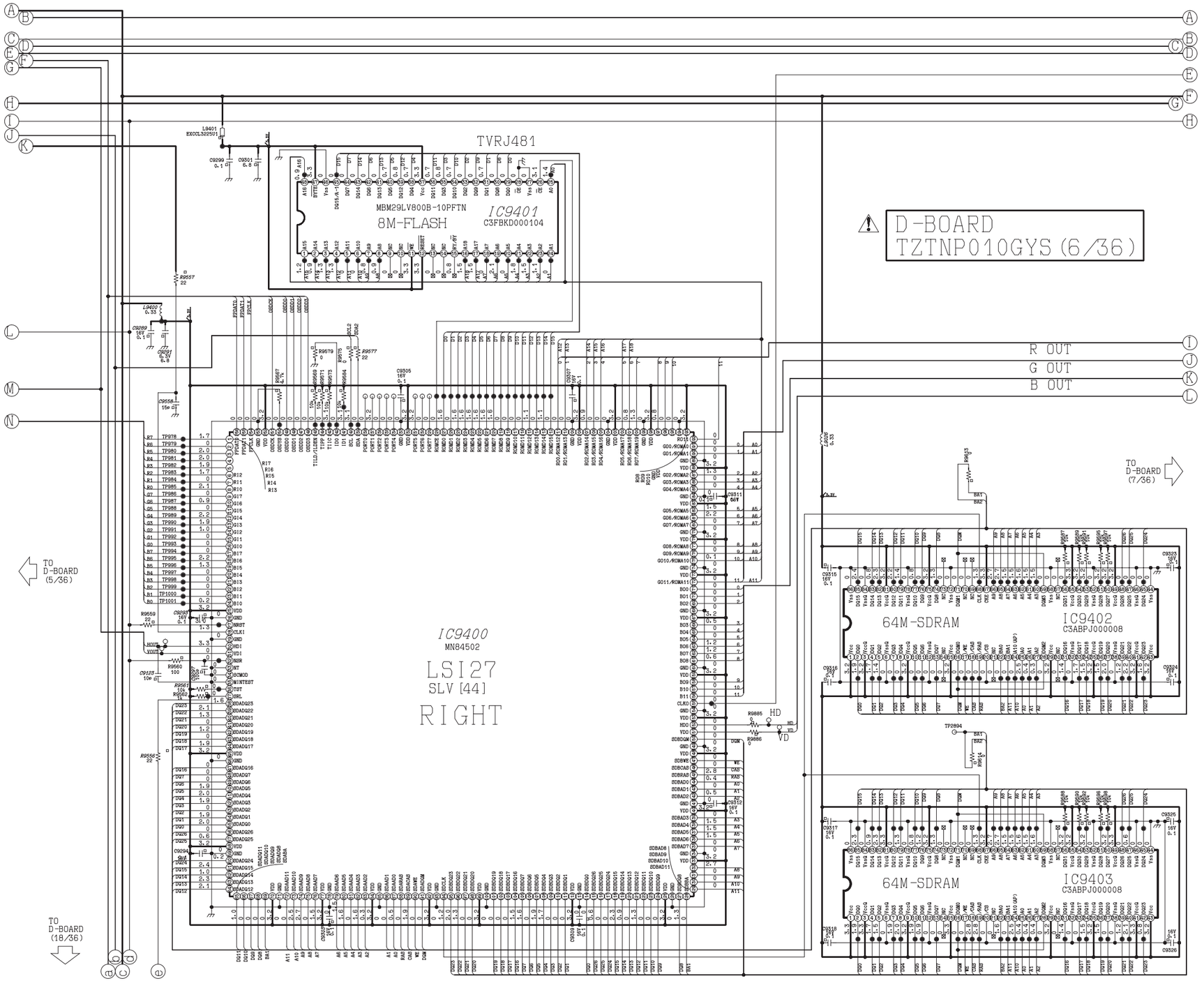
13.29. D-Board (4/36) Schematic Diagram



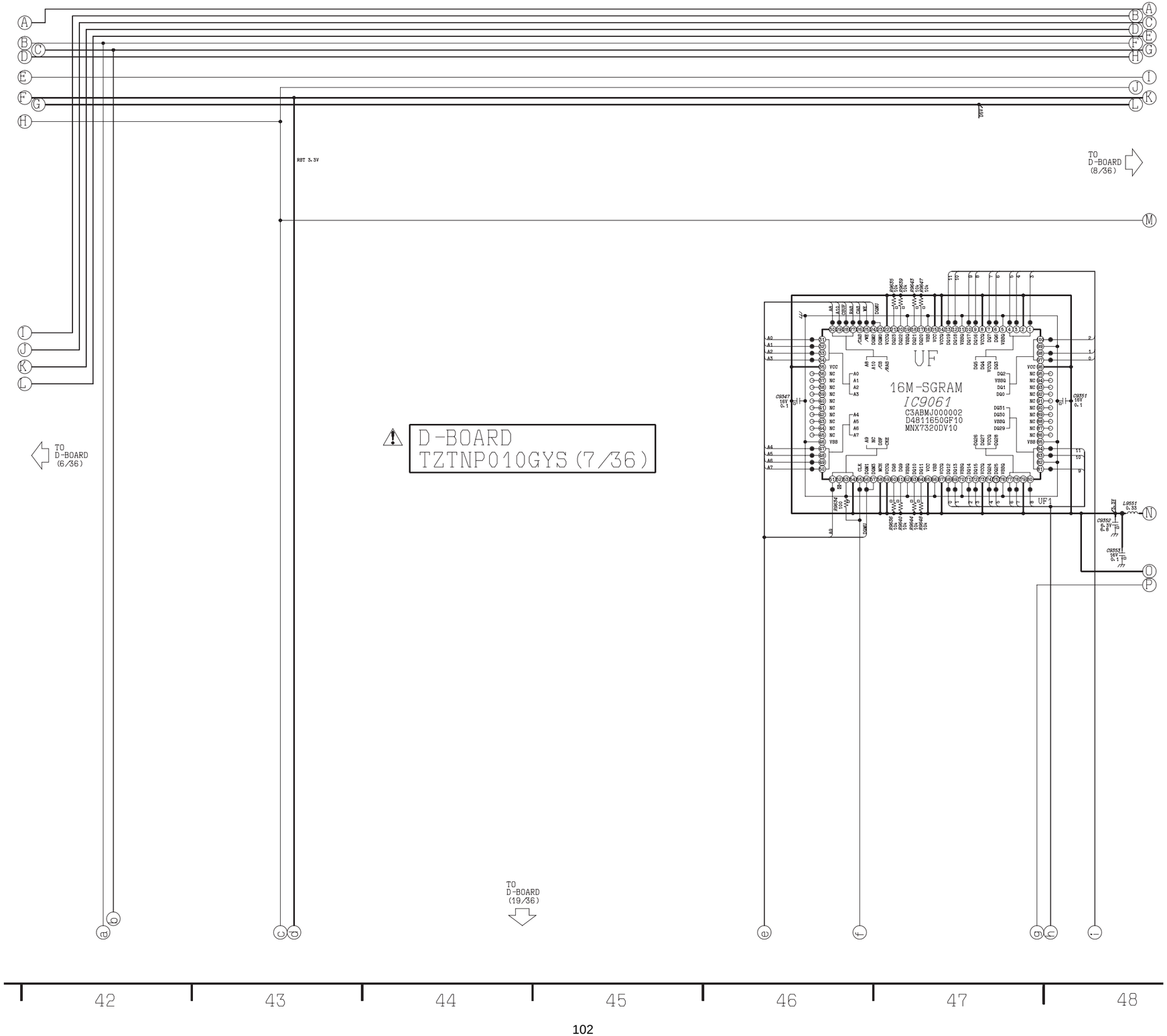
13.30. D-Board (5/36) Schematic Diagram



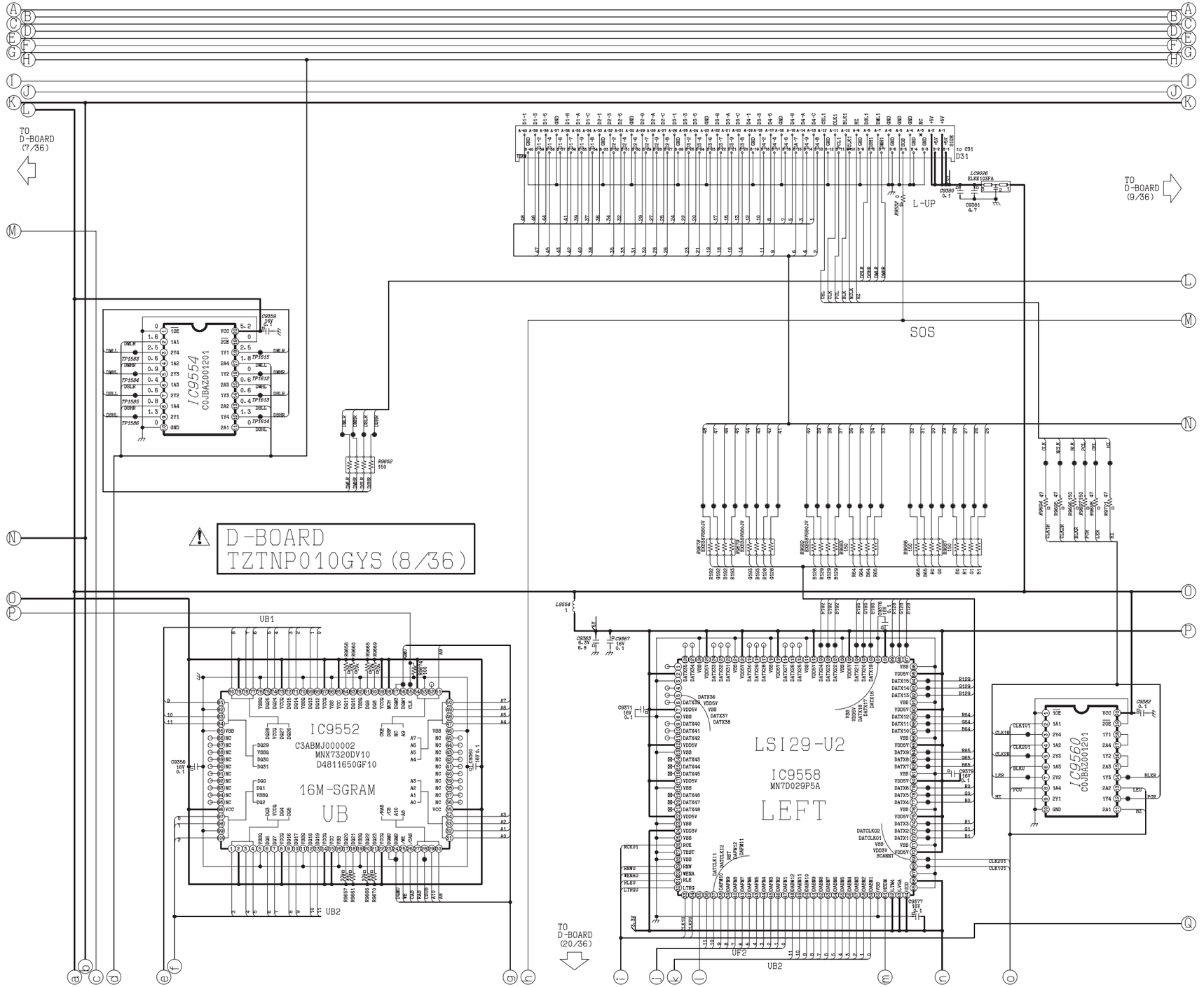
13.31. D-Board (6/36) Schematic Diagram



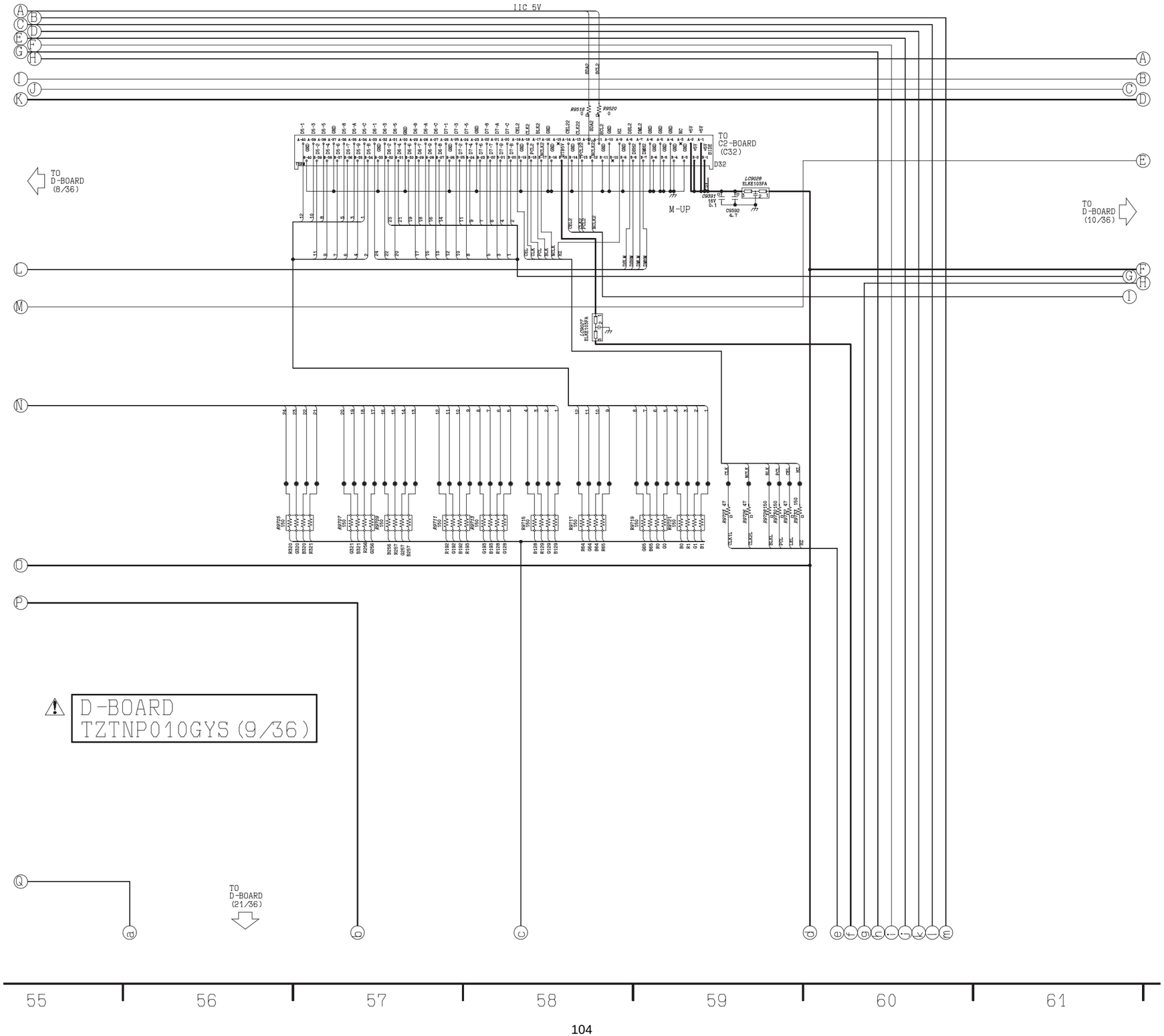
13.32. D-Board (7/36) Schematic Diagram



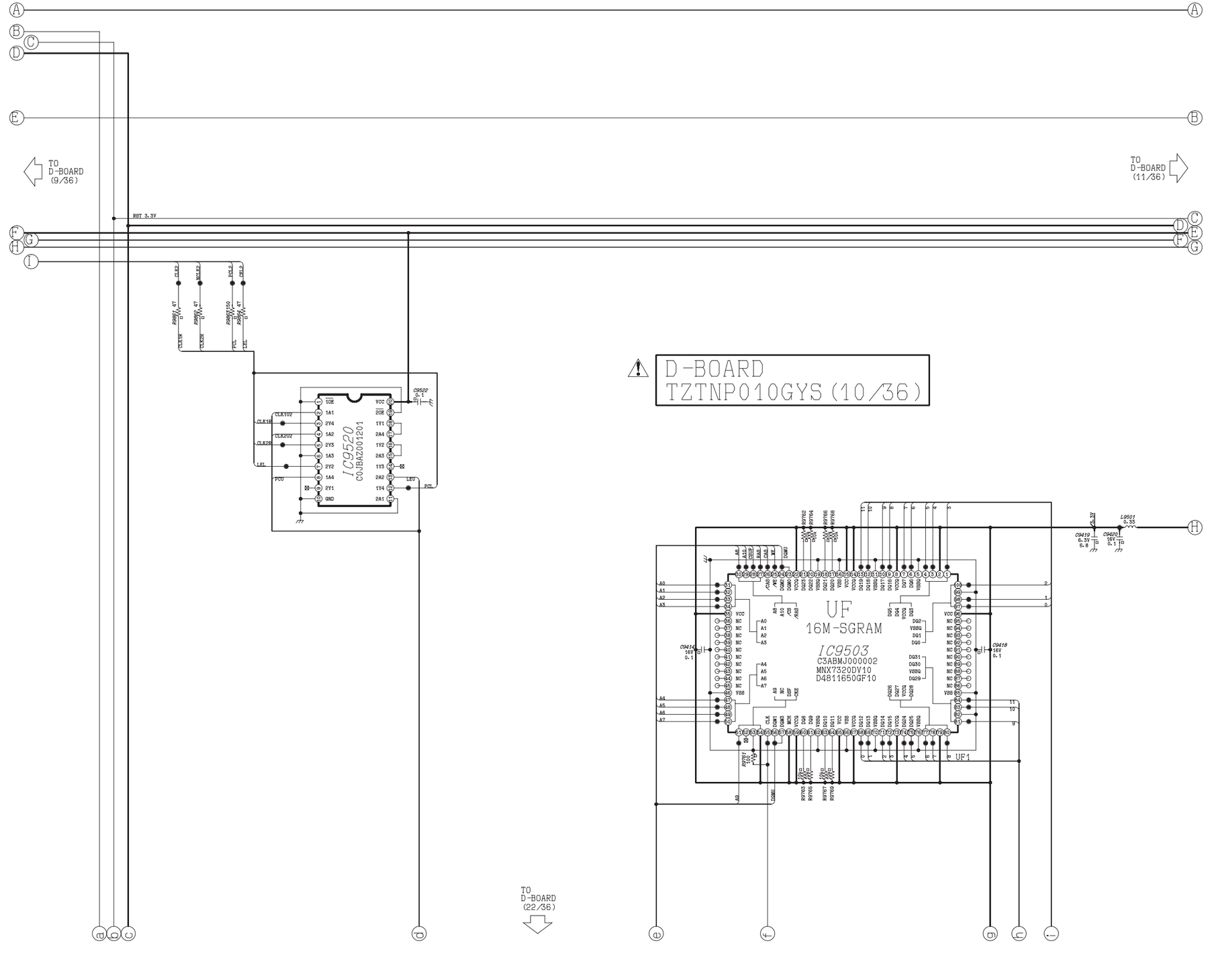
13.33. D-Board (8/36) Schematic Diagram



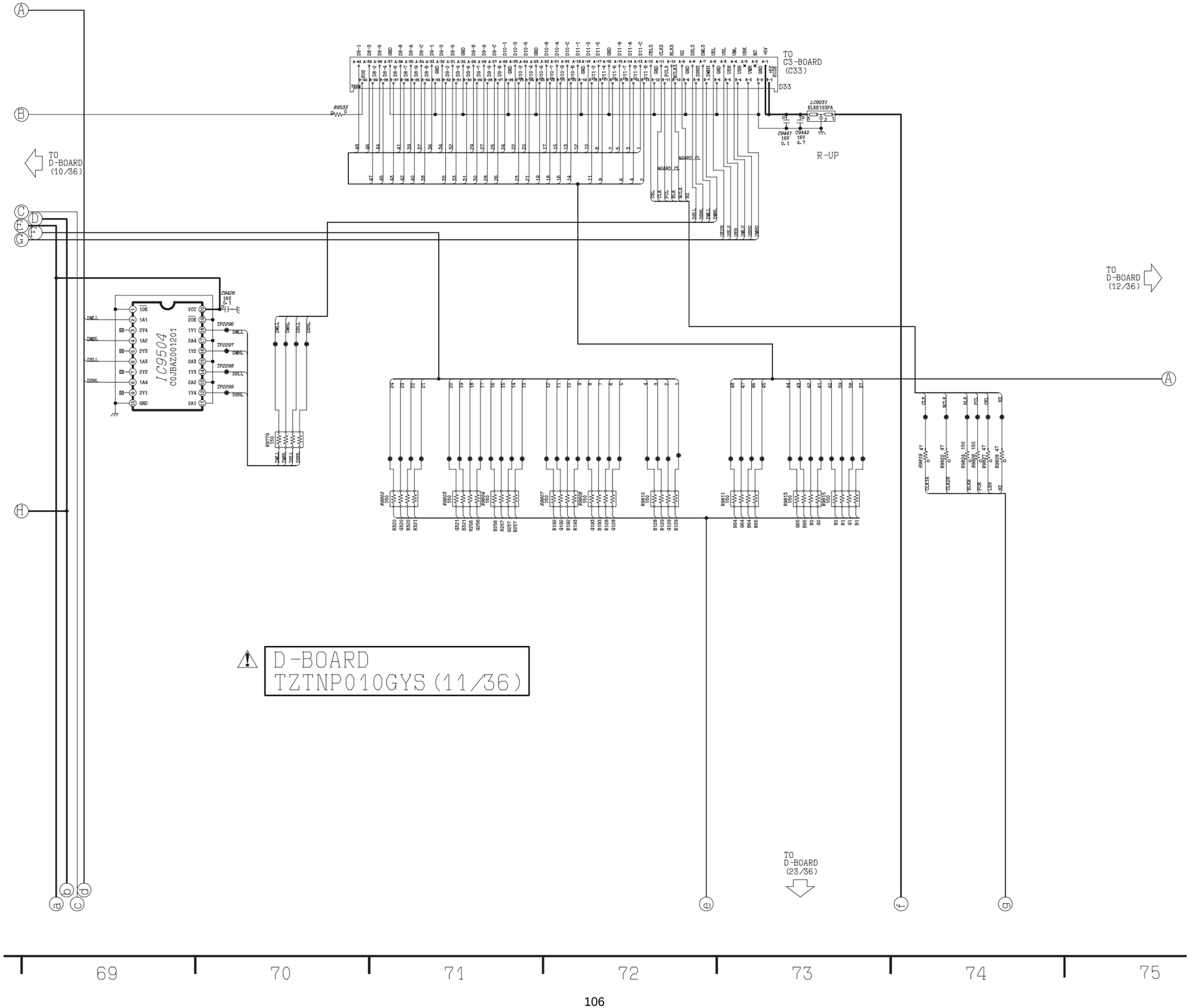
13.34. D-Board (9/36) Schematic Diagram



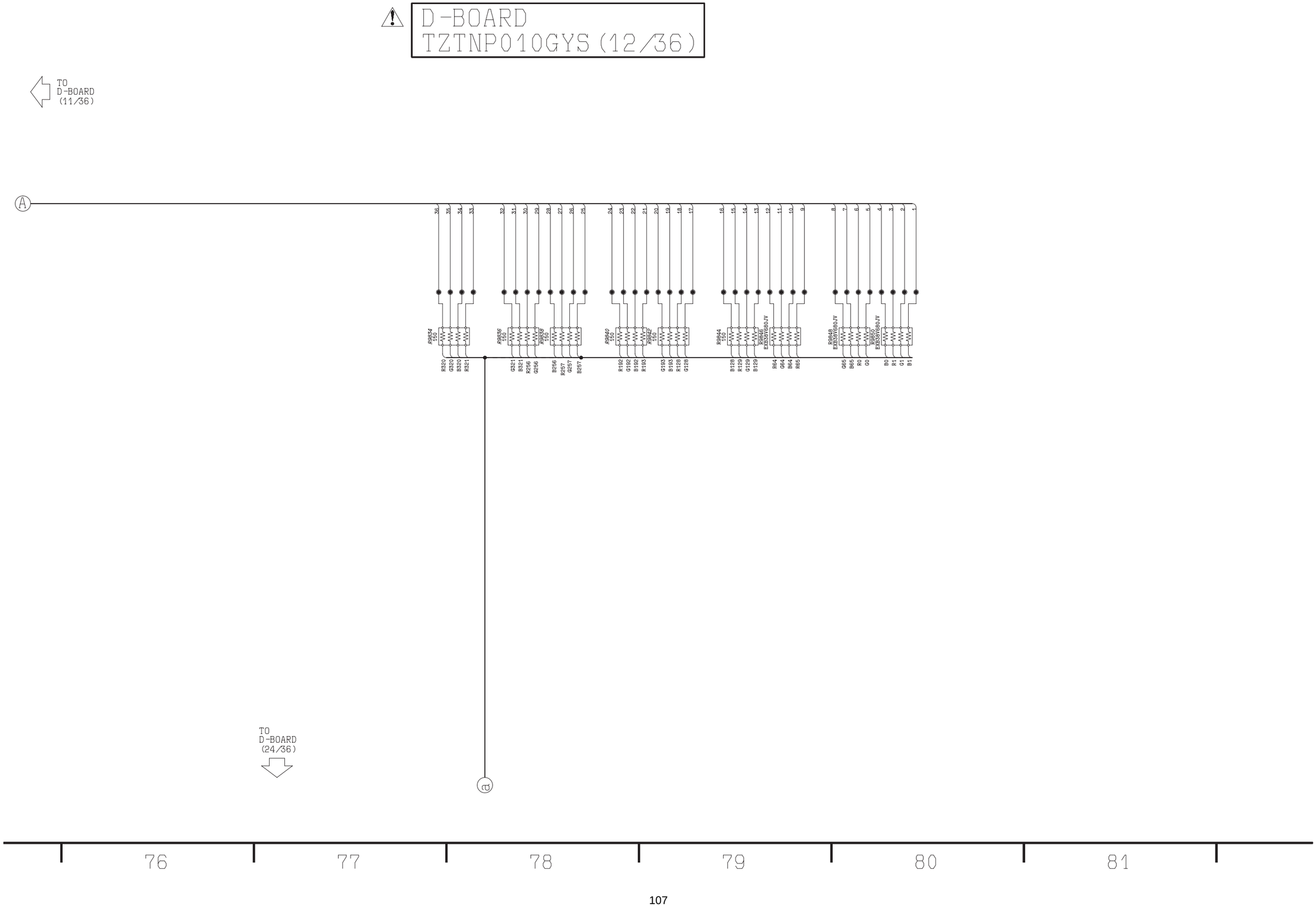
13.35. D-Board (10/36) Schematic Diagram



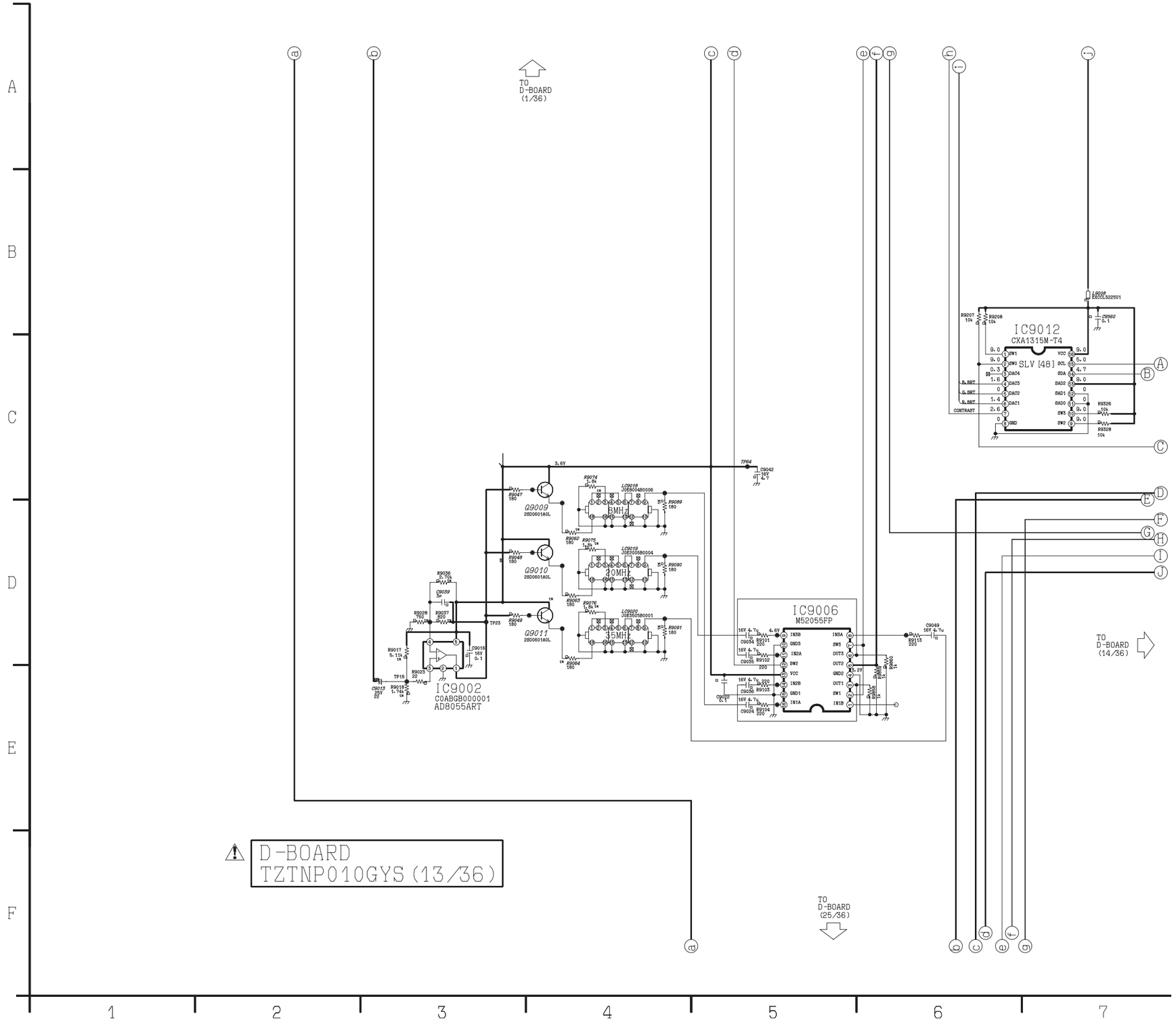
13.36. D-Board (11/36) Schematic Diagram



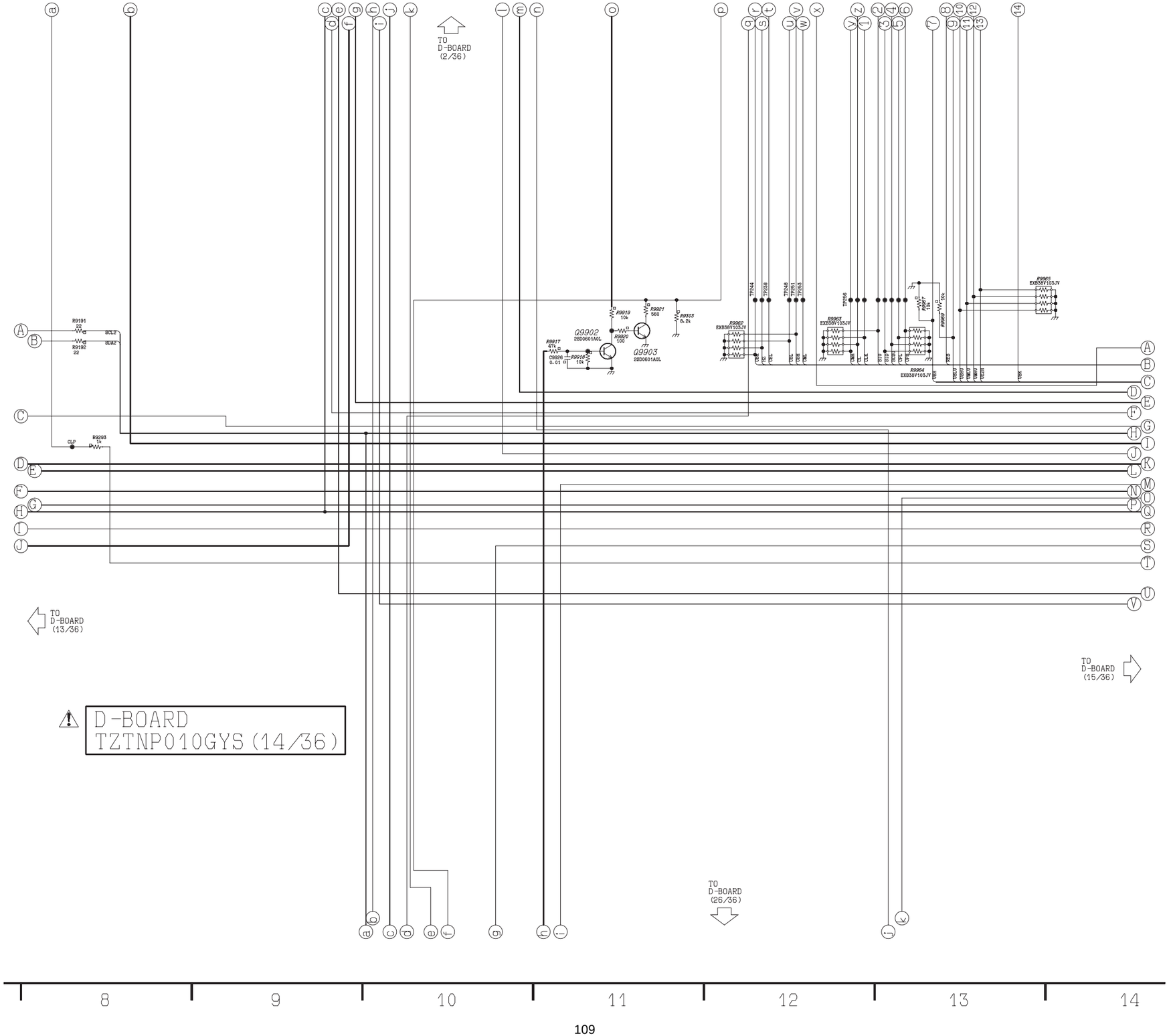
13.37. D-Board (12/36) Schematic Diagram



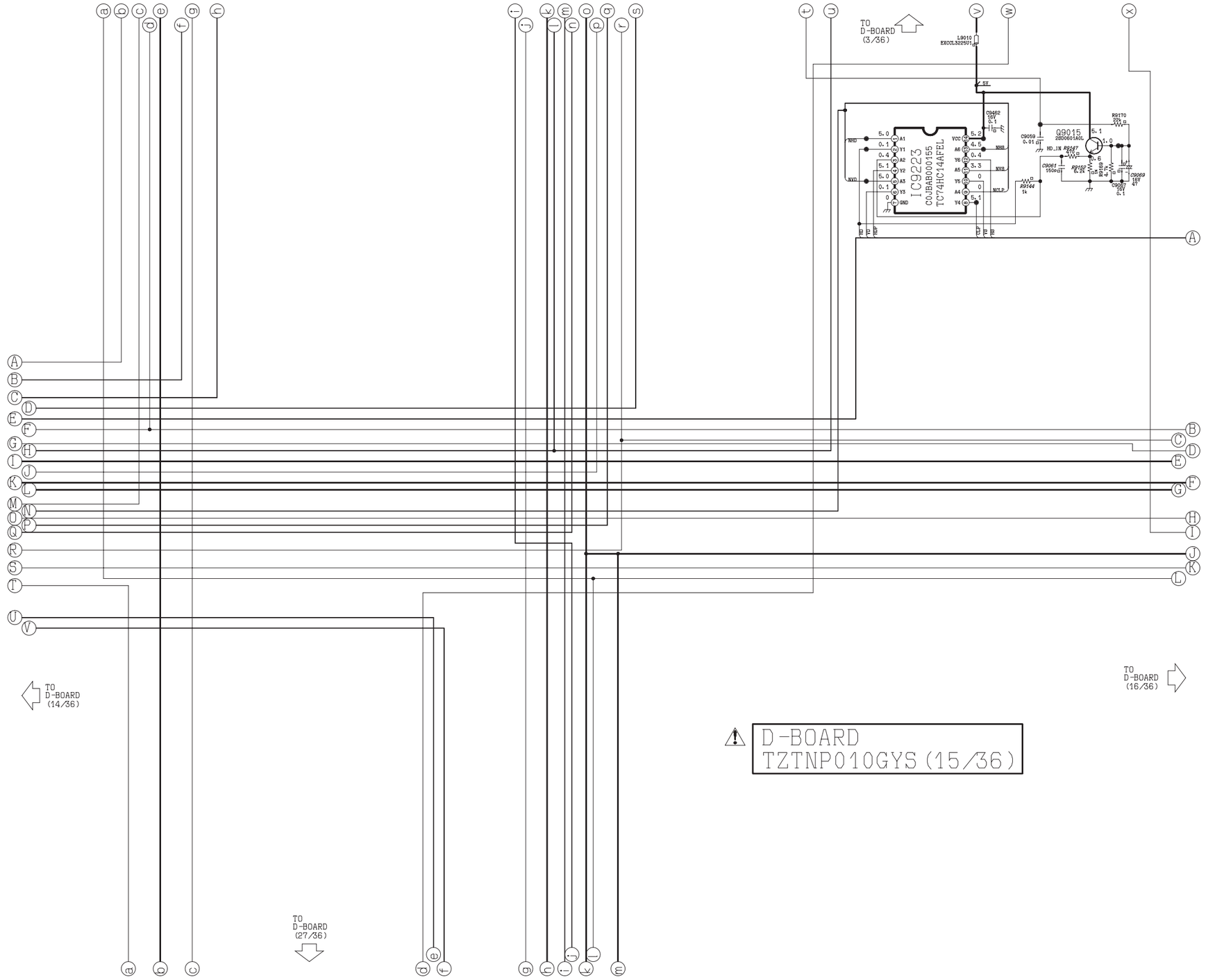
13.38. D-Board (13/36) Schematic Diagram



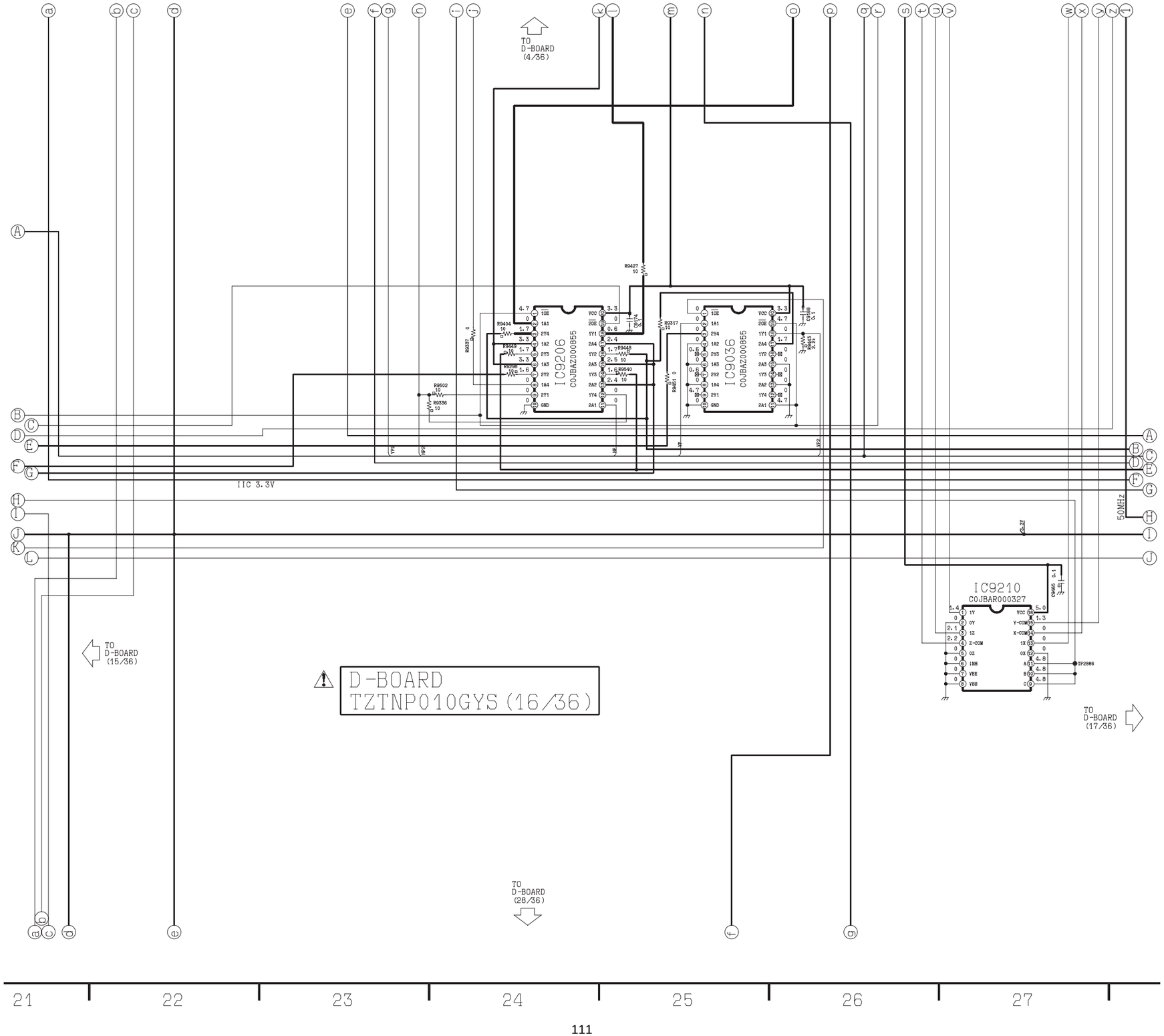
13.39. D-Board (14/36) Schematic Diagram



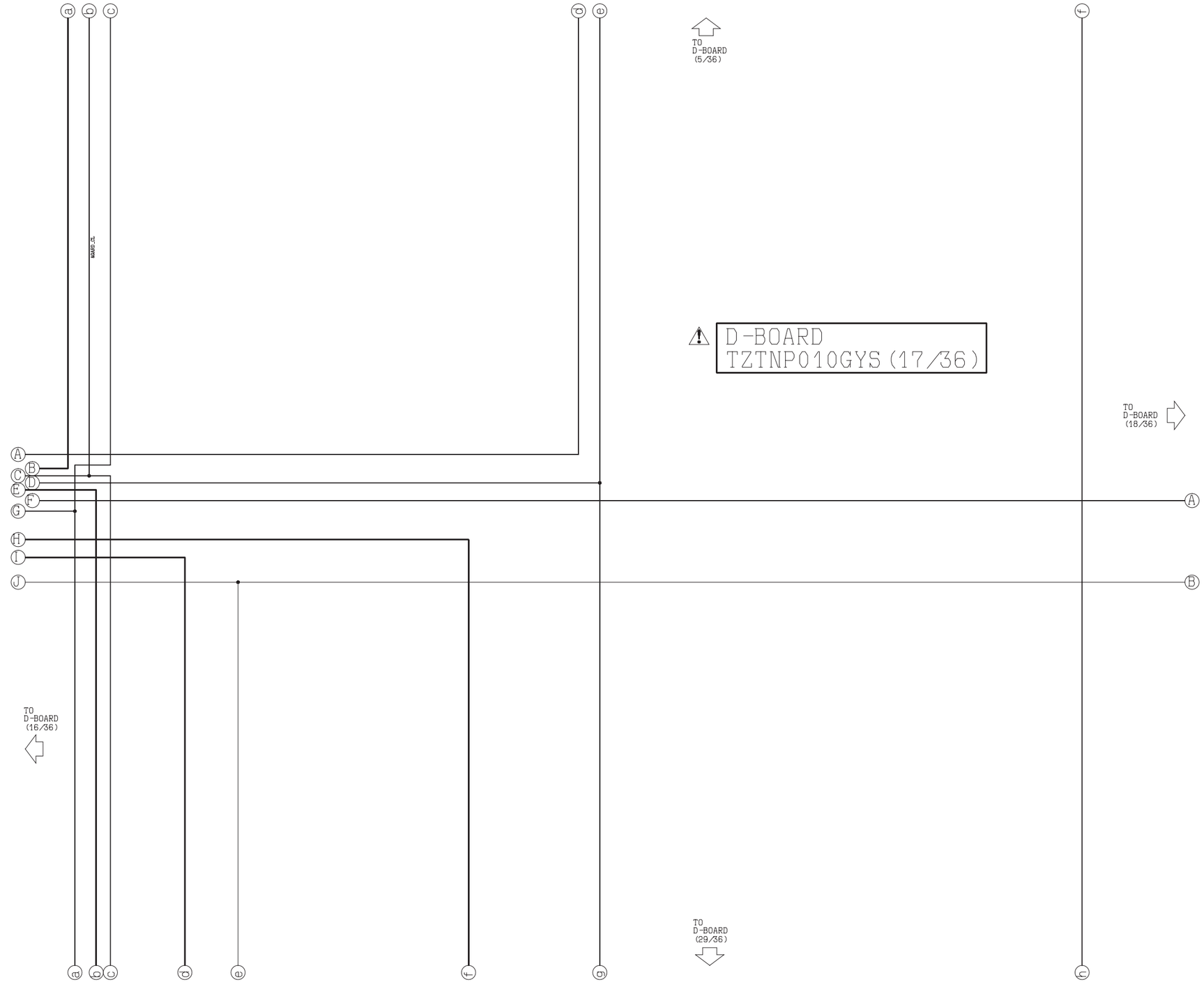
13.40. D-Board (15/36) Schematic Diagram



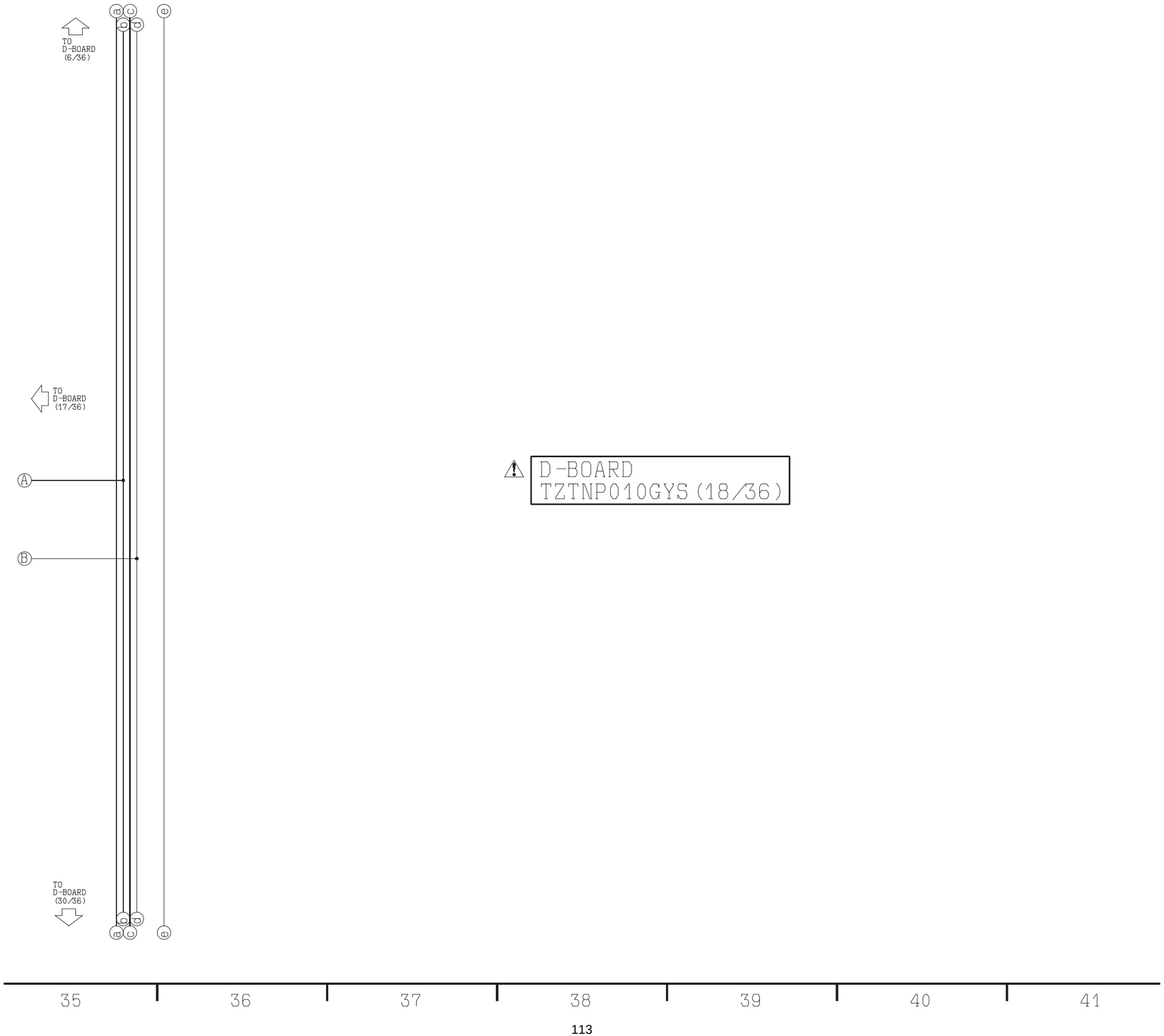
13.41. D-Board (16/36) Schematic Diagram



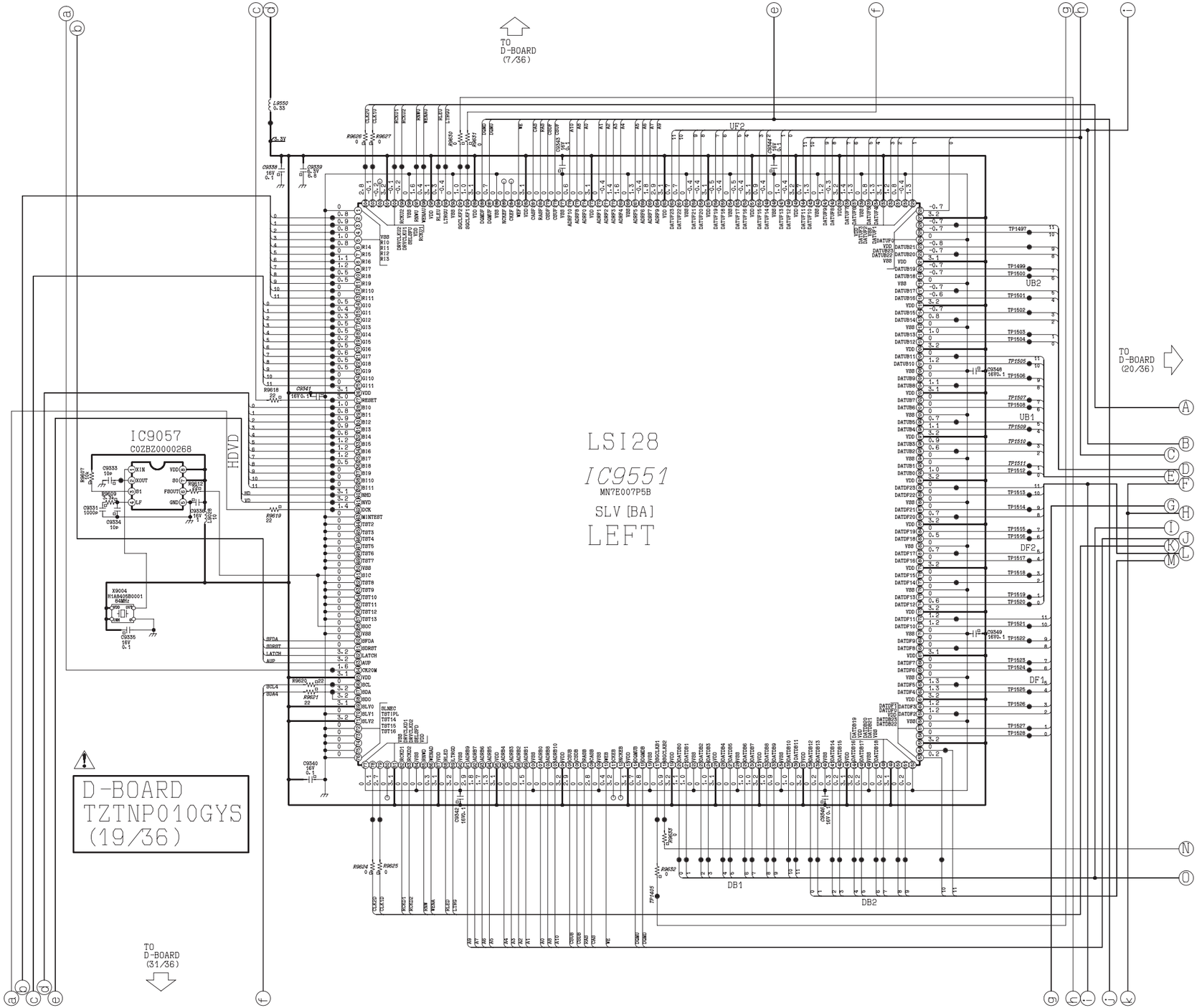
13.42. D-Board (17/36) Schematic Diagram



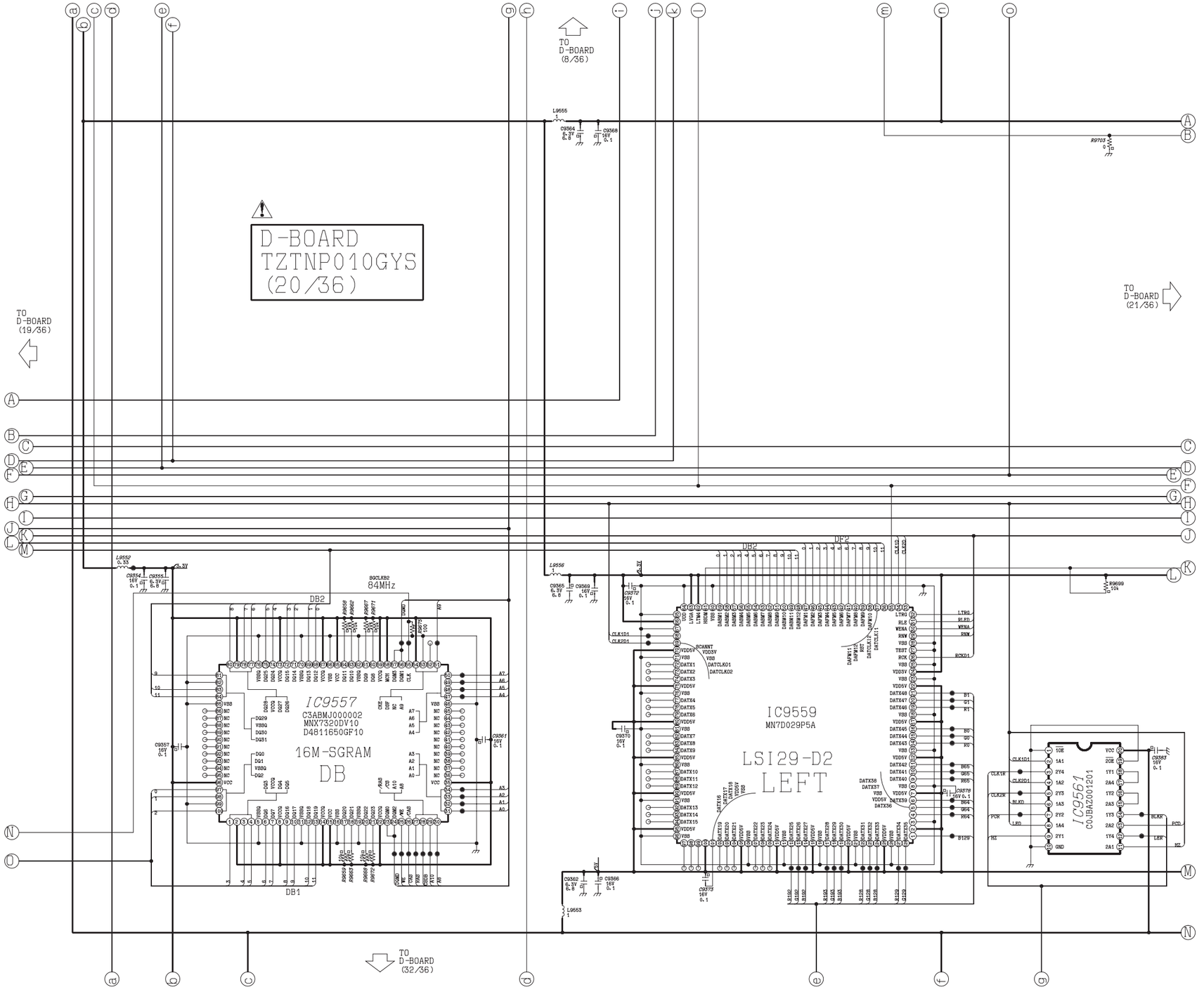
13.43. D-Board (18/36) Schematic Diagram



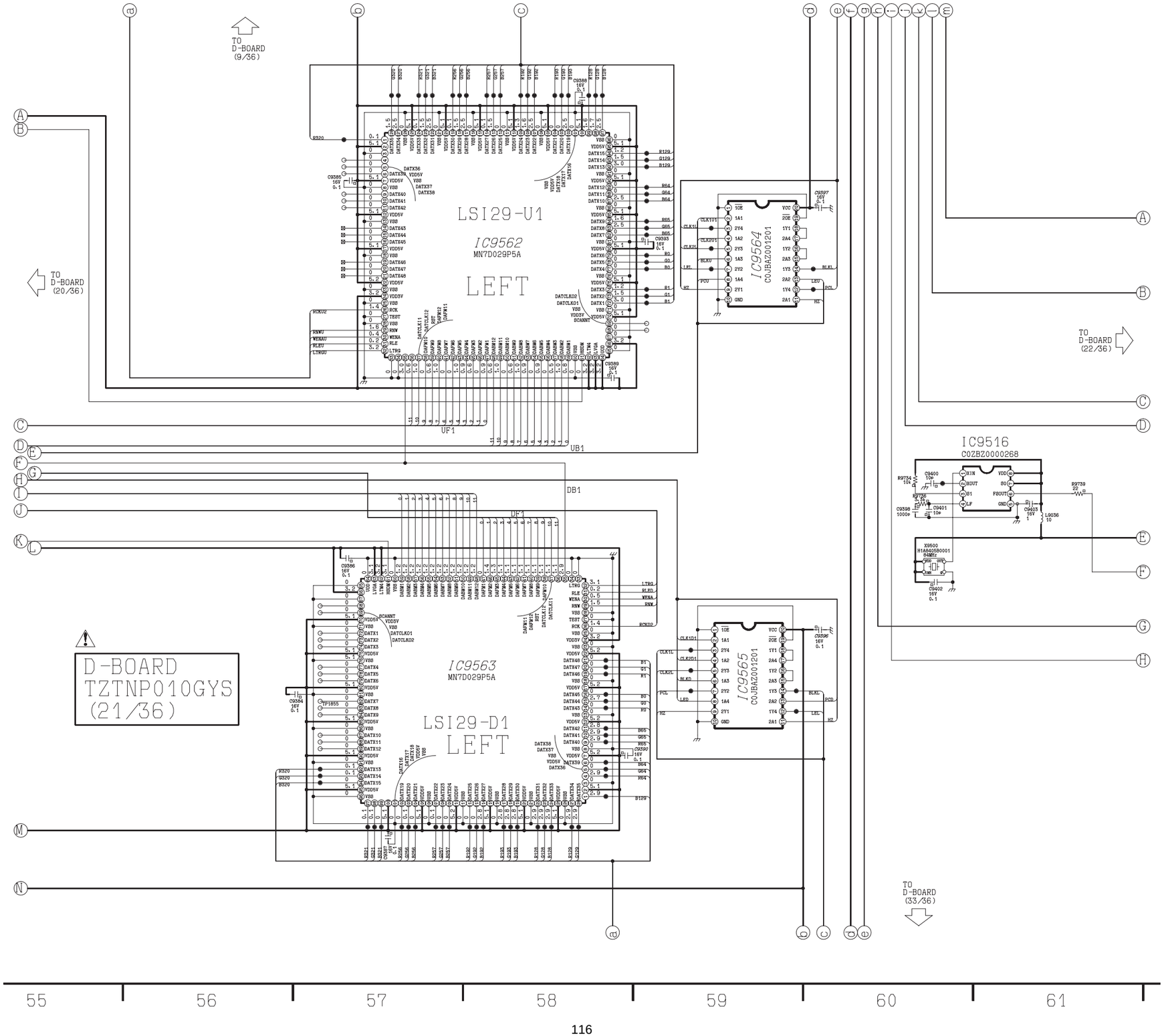
13.44. D-Board (19/36) Schematic Diagram



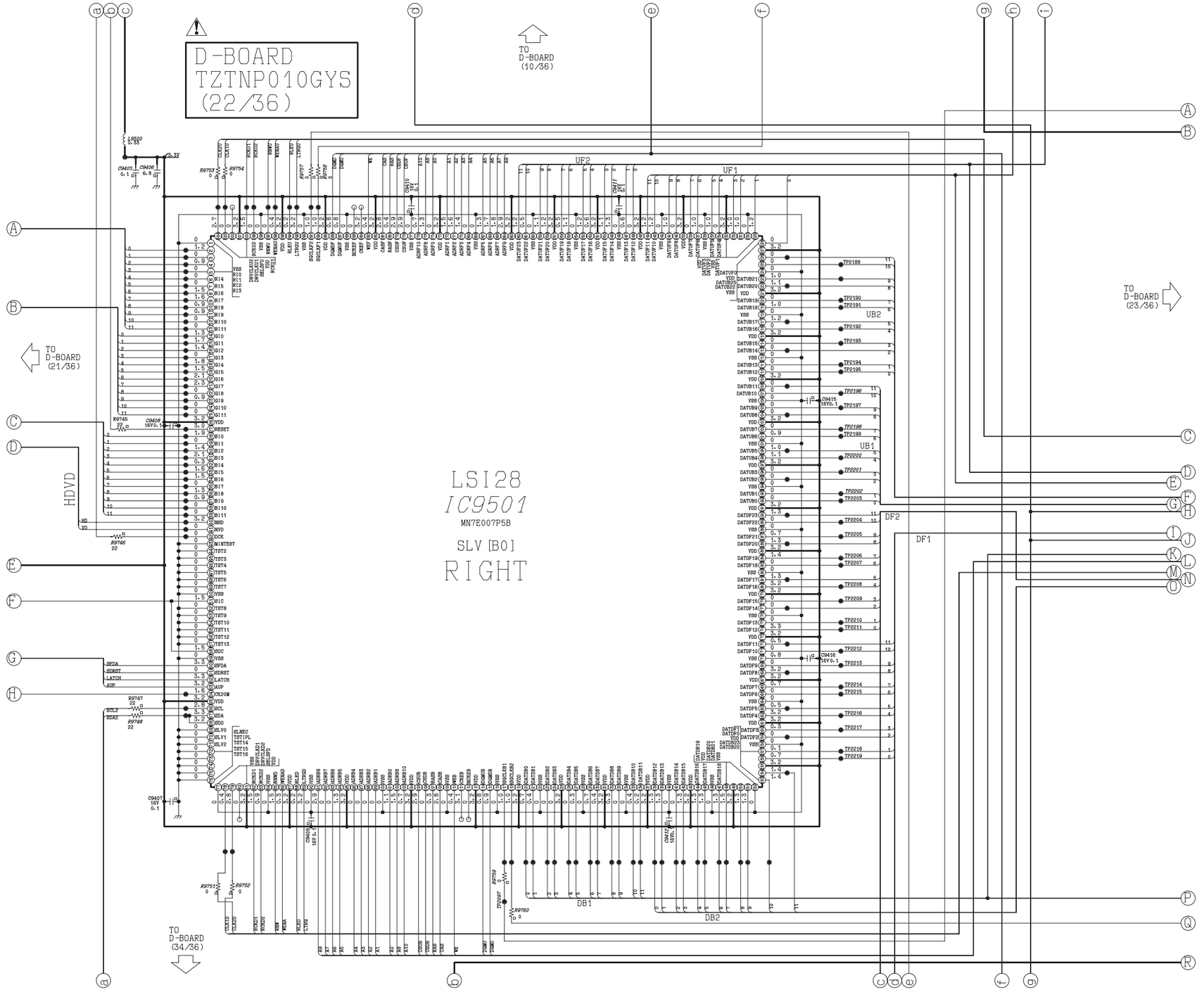
13.45. D-Board (20/36) Schematic Diagram



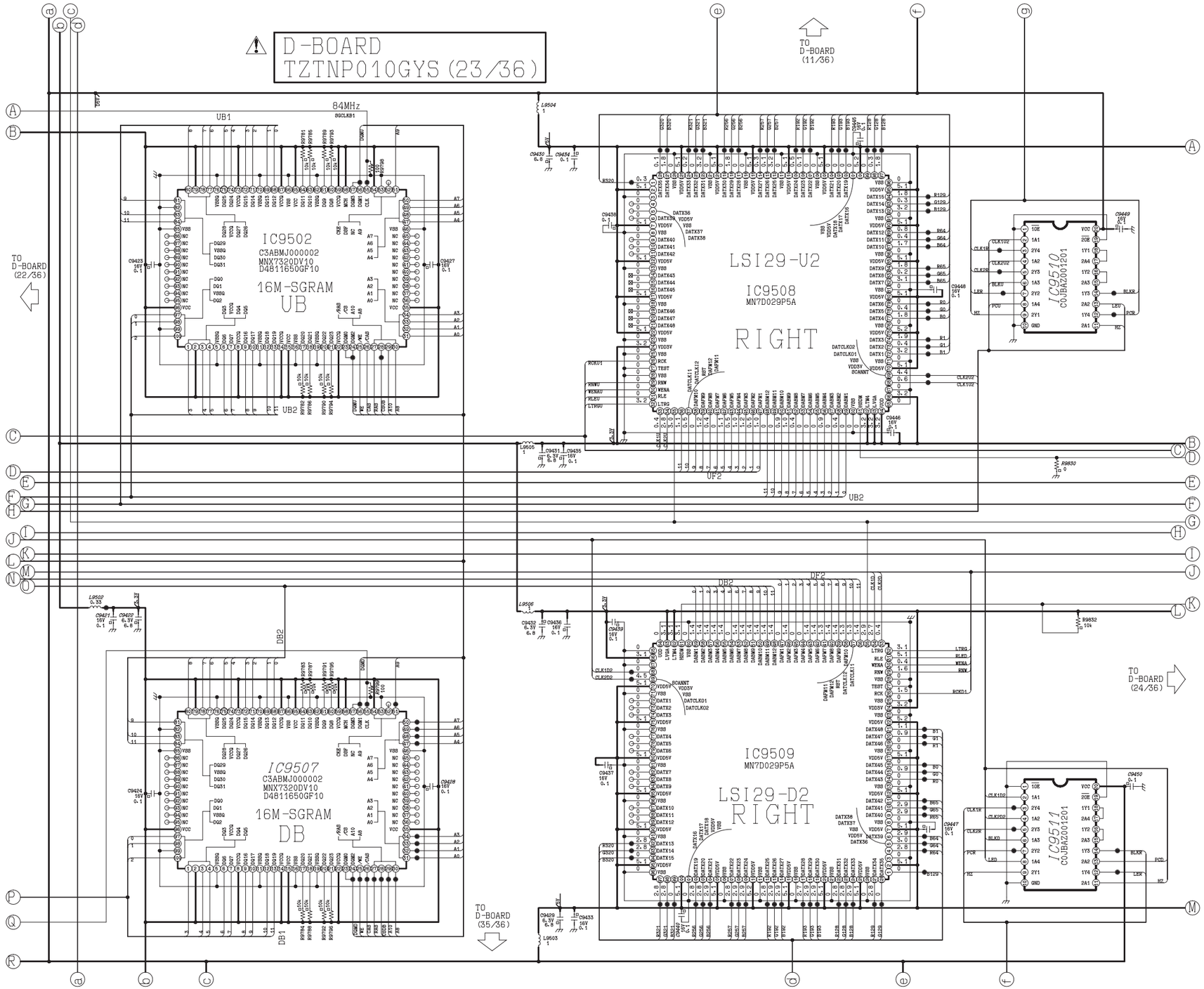
13.46. D-Board (21/36) Schematic Diagram



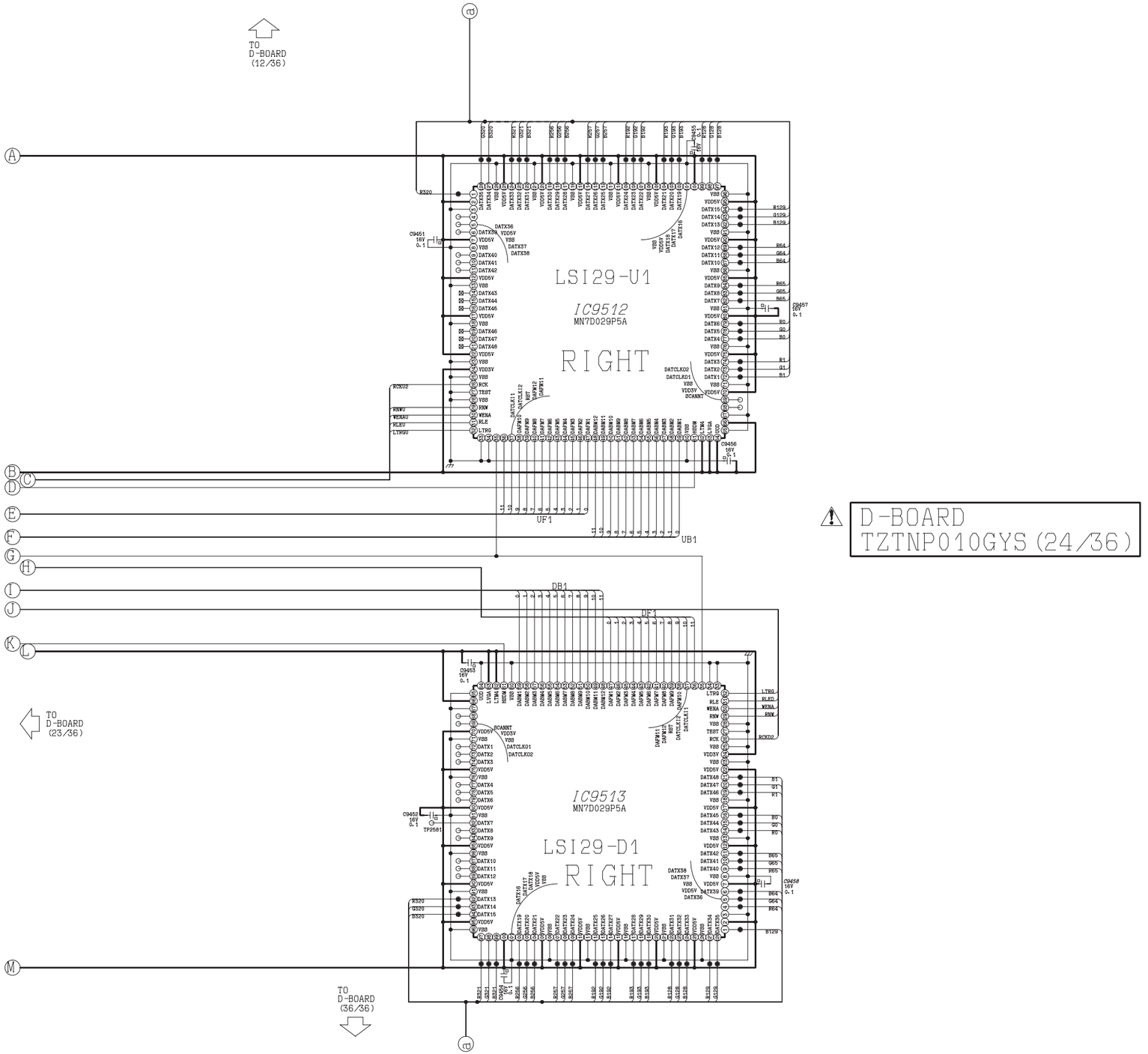
13.47. D-Board (22/36) Schematic Diagram



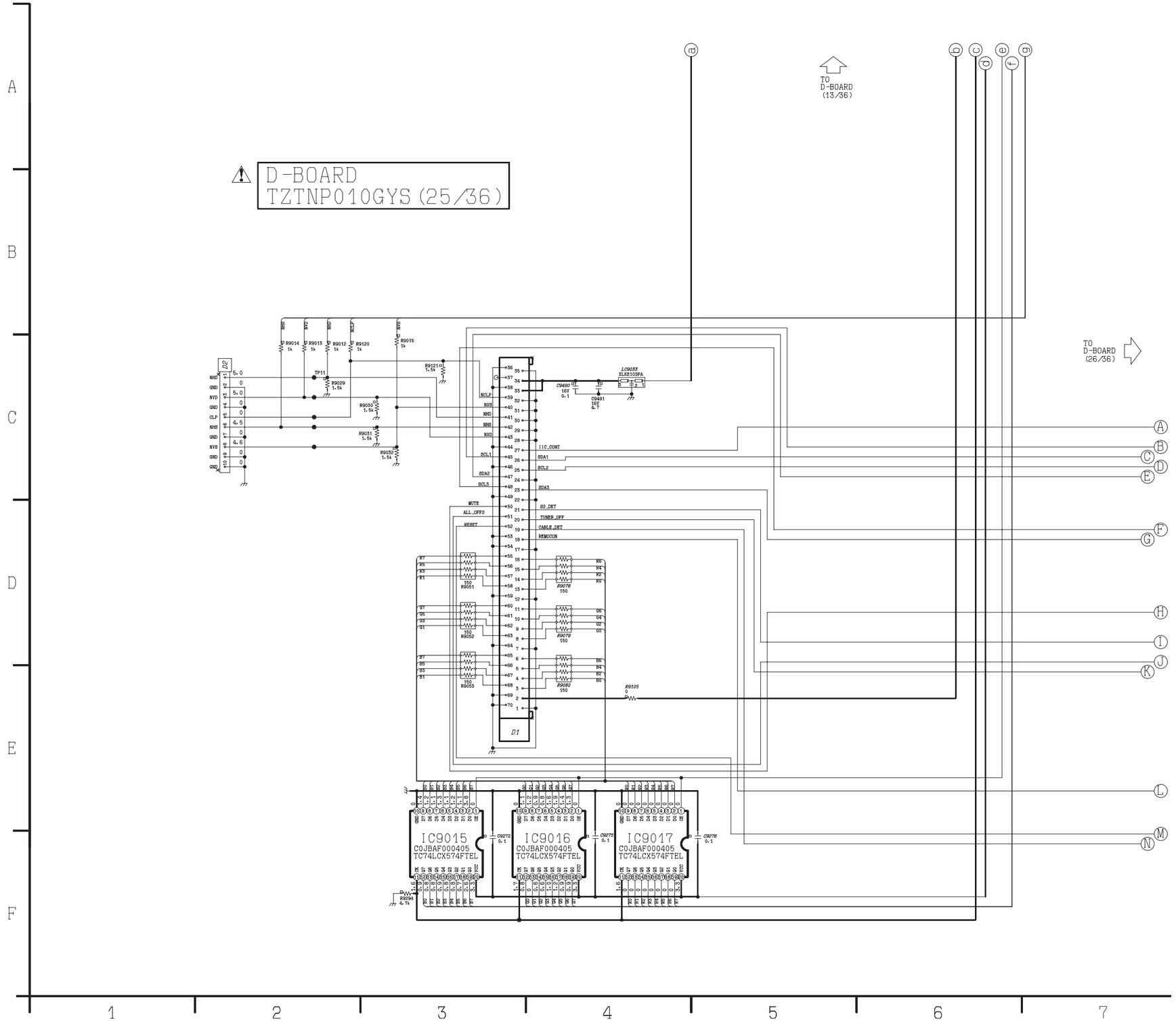
13.48. D-Board (23/36) Schematic Diagram



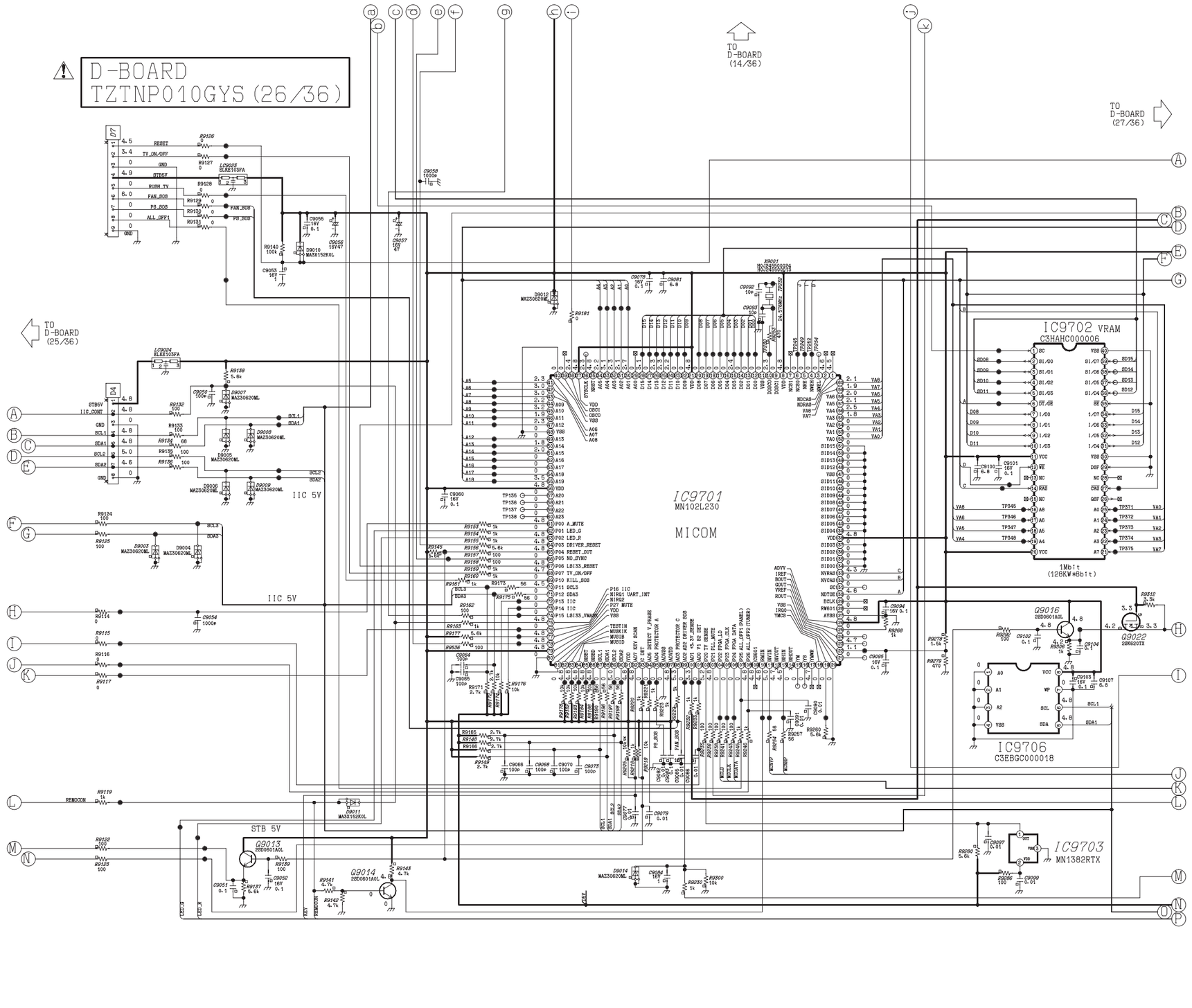
13.49. D-Board (24/36) Schematic Diagram



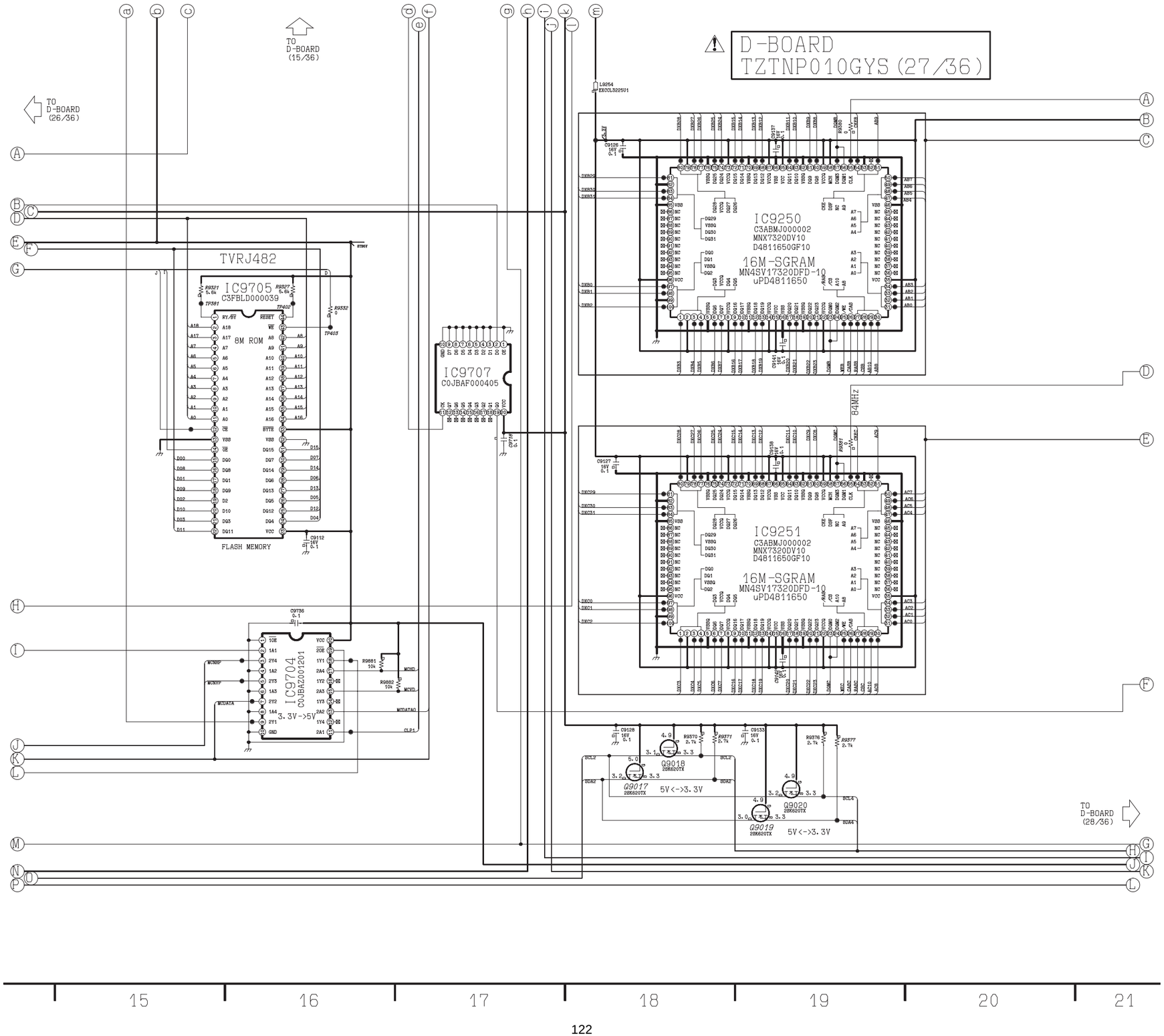
13.50. D-Board (25/36) Schematic Diagram



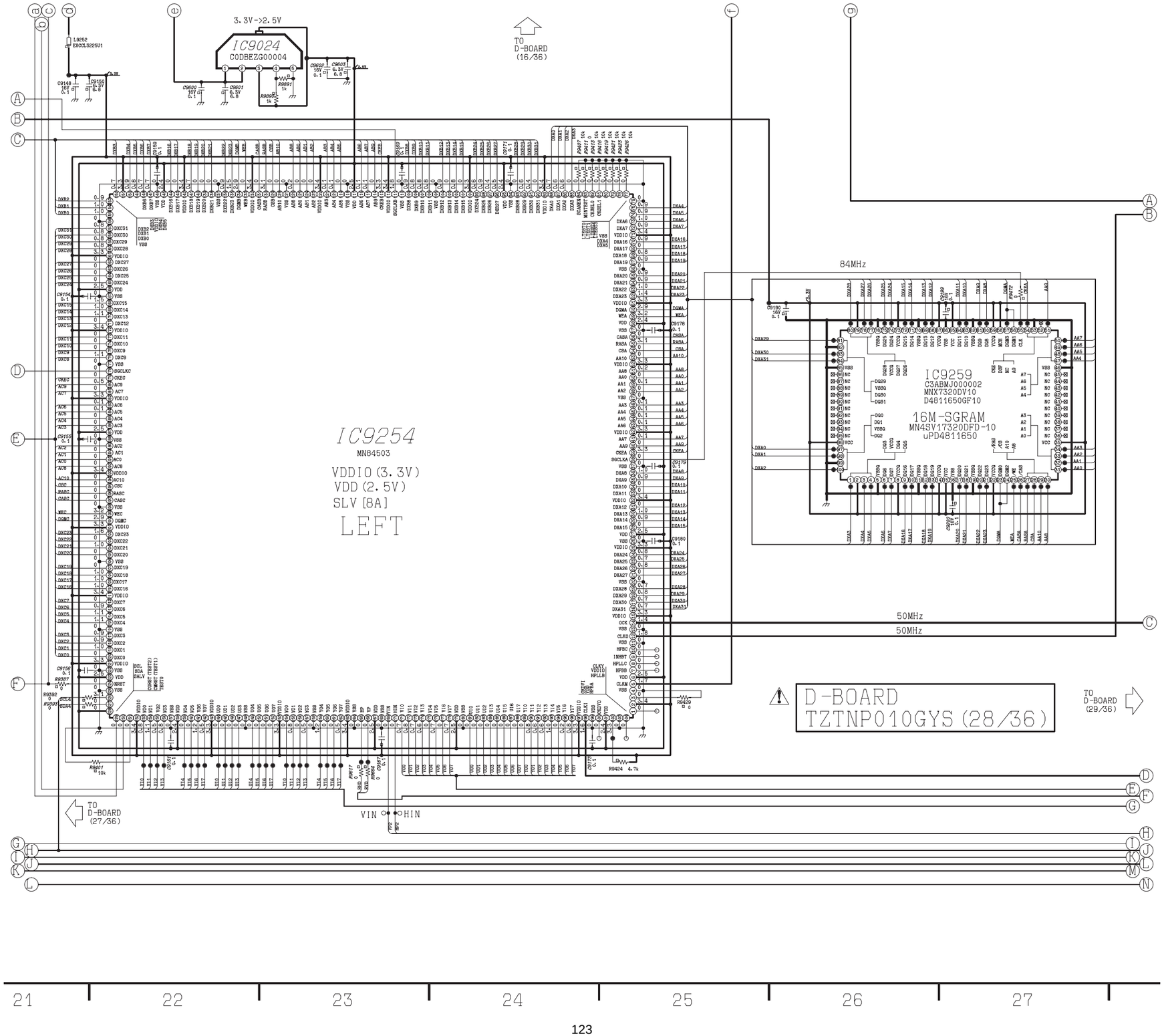
13.51. D-Board (26/36) Schematic Diagram



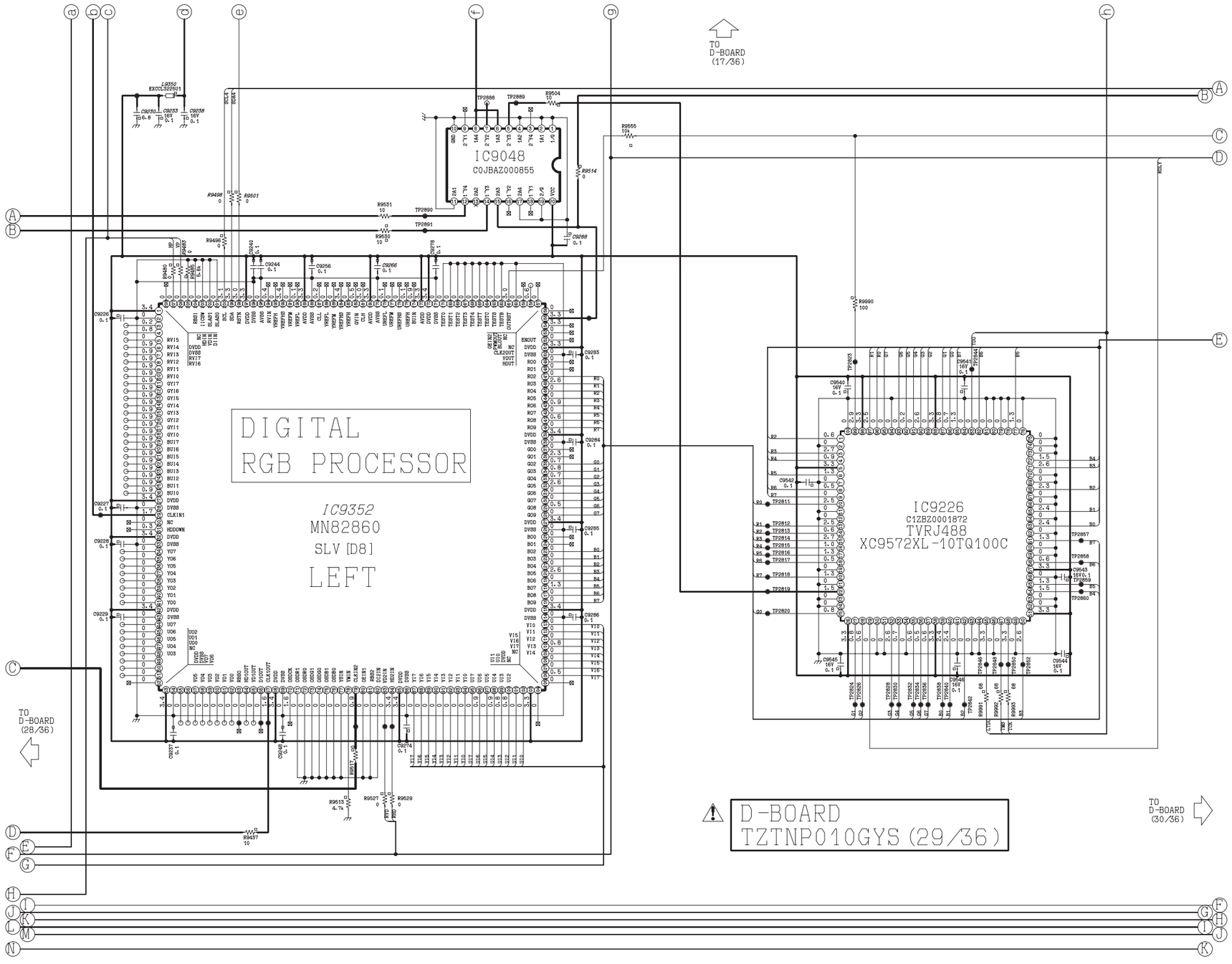
13.52. D-Board (27/36) Schematic Diagram



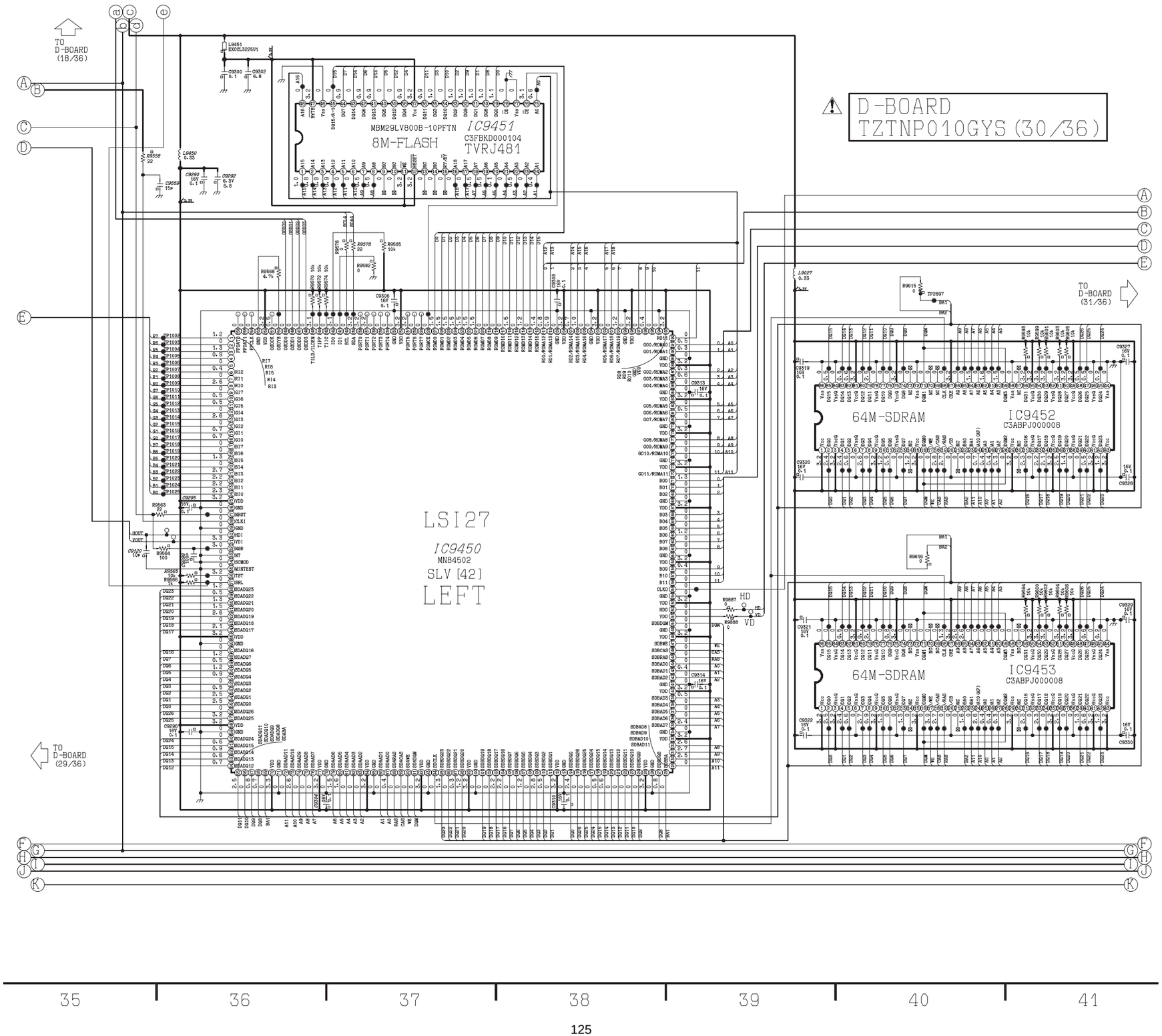
13.53. D-Board (28/36) Schematic Diagram



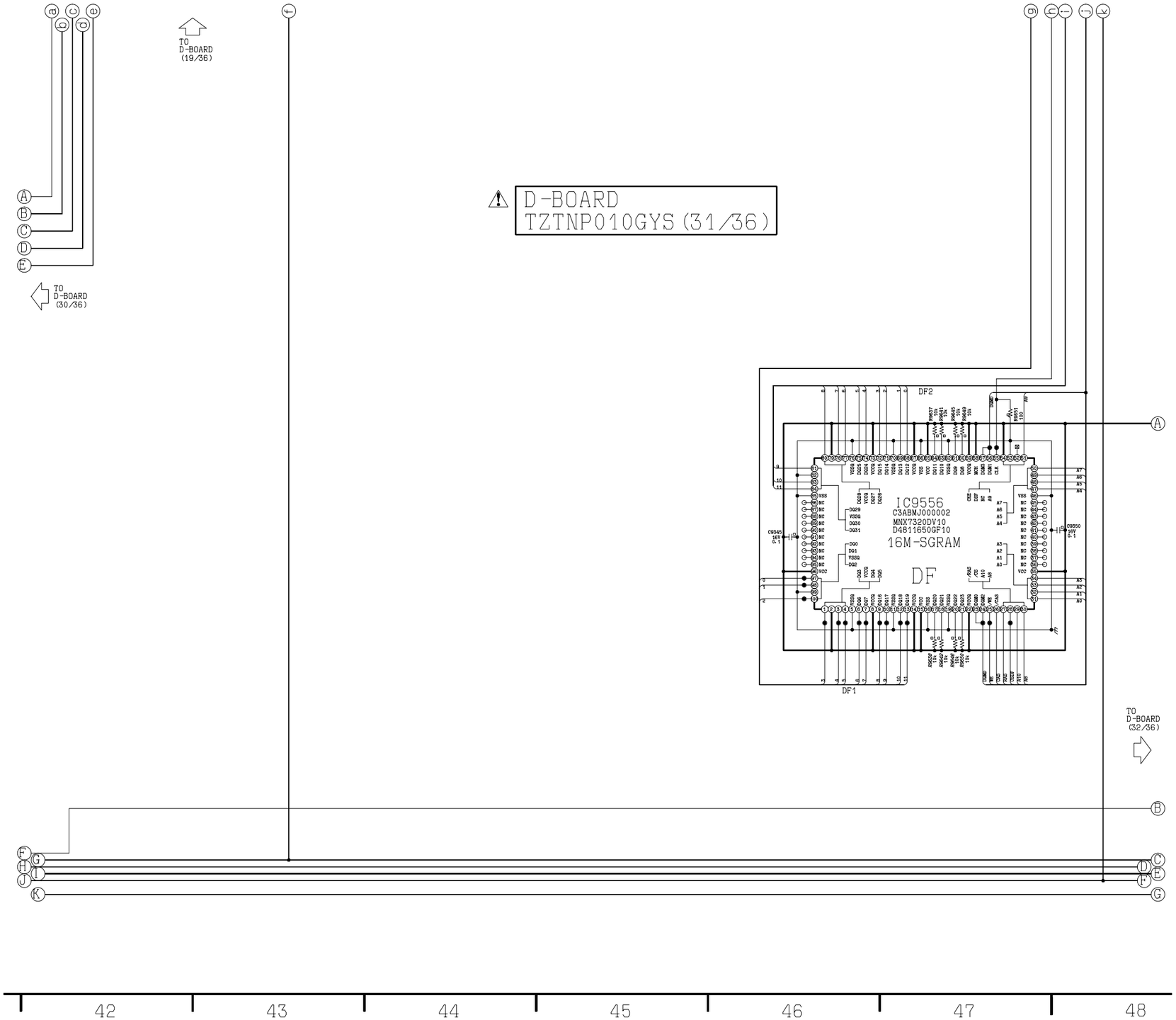
13.54. D-Board (29/36) Schematic Diagram



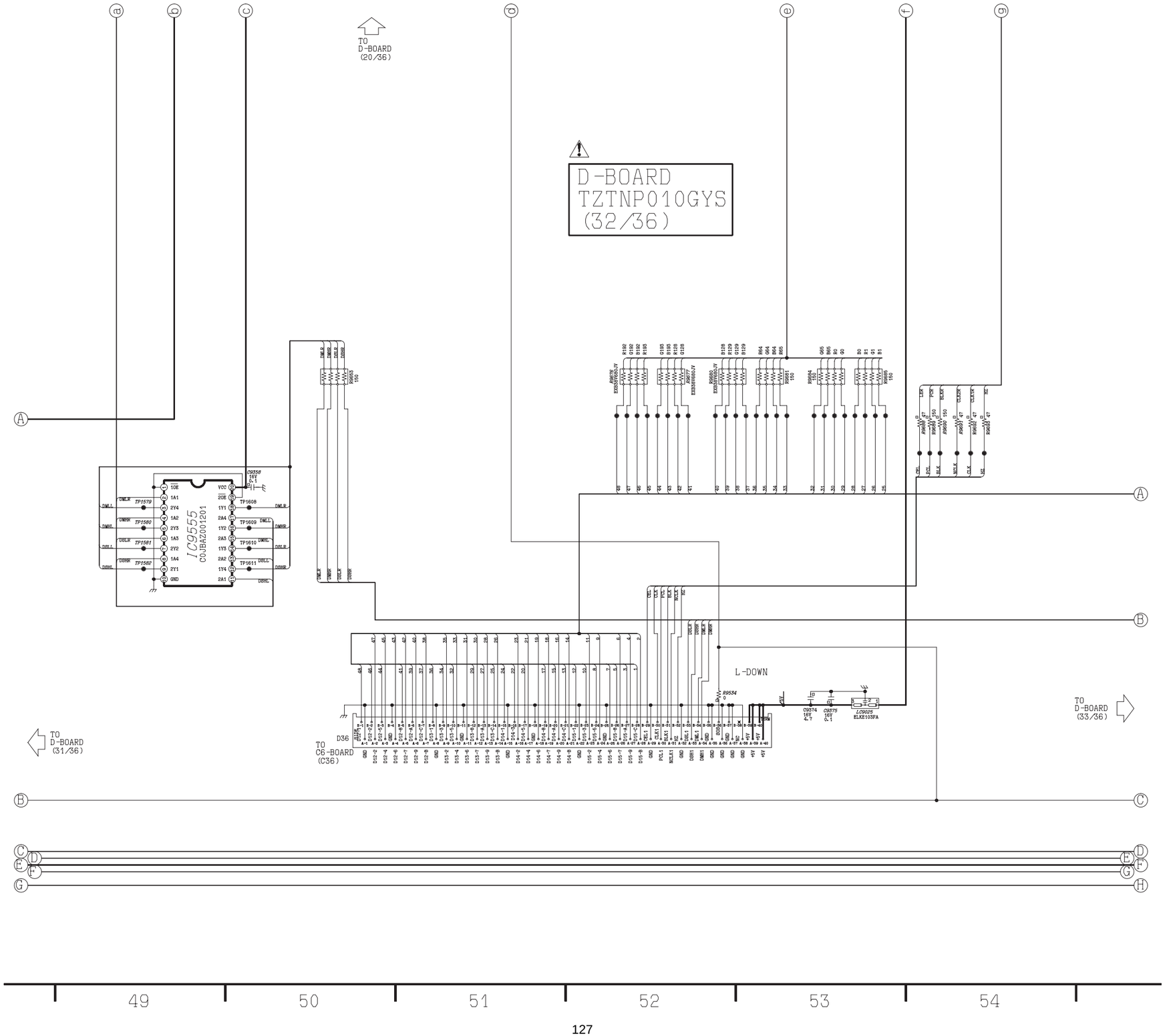
13.55. D-Board (30/36) Schematic Diagram



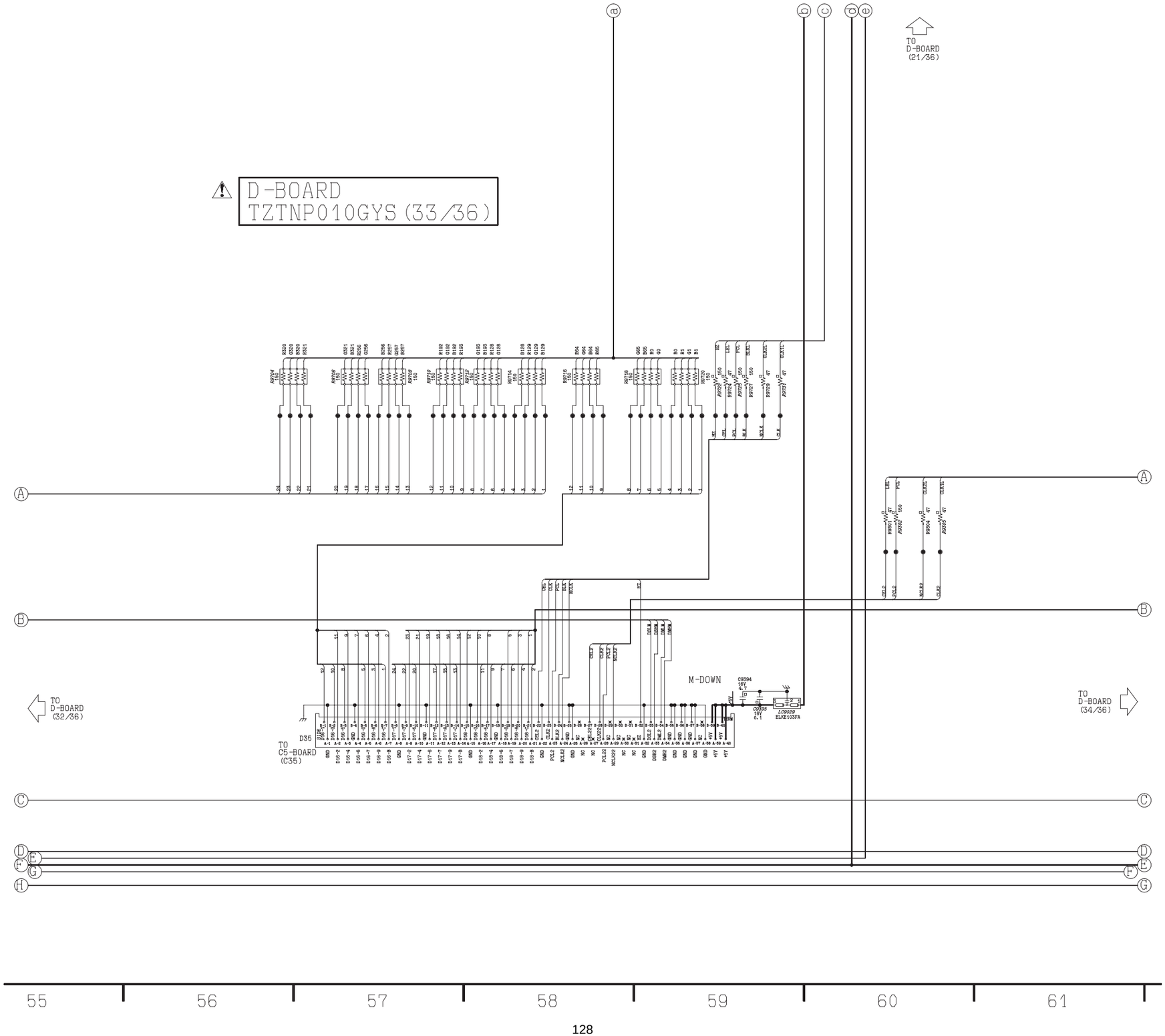
13.56. D-Board (31/36) Schematic Diagram



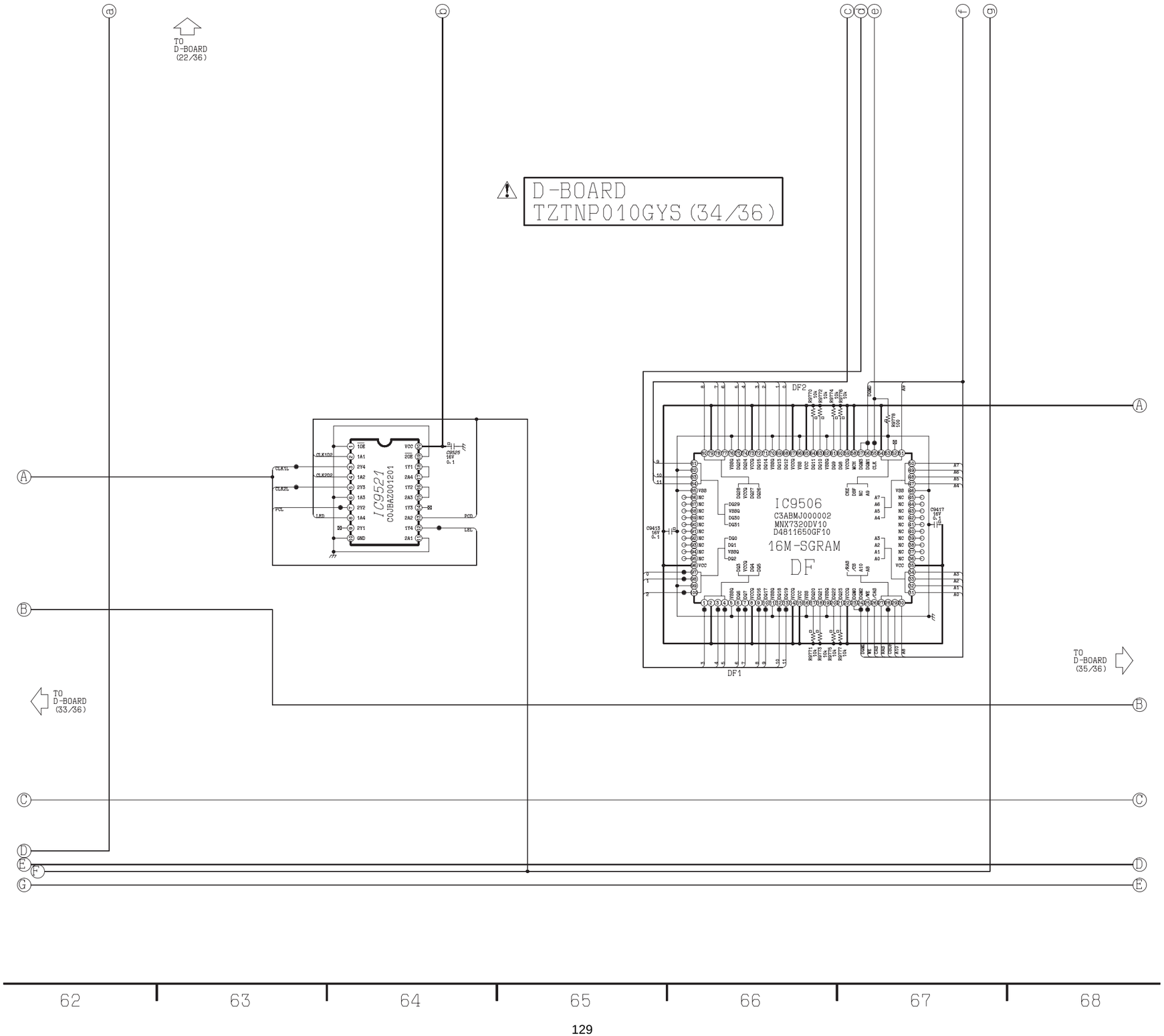
13.57. D-Board (32/36) Schematic Diagram



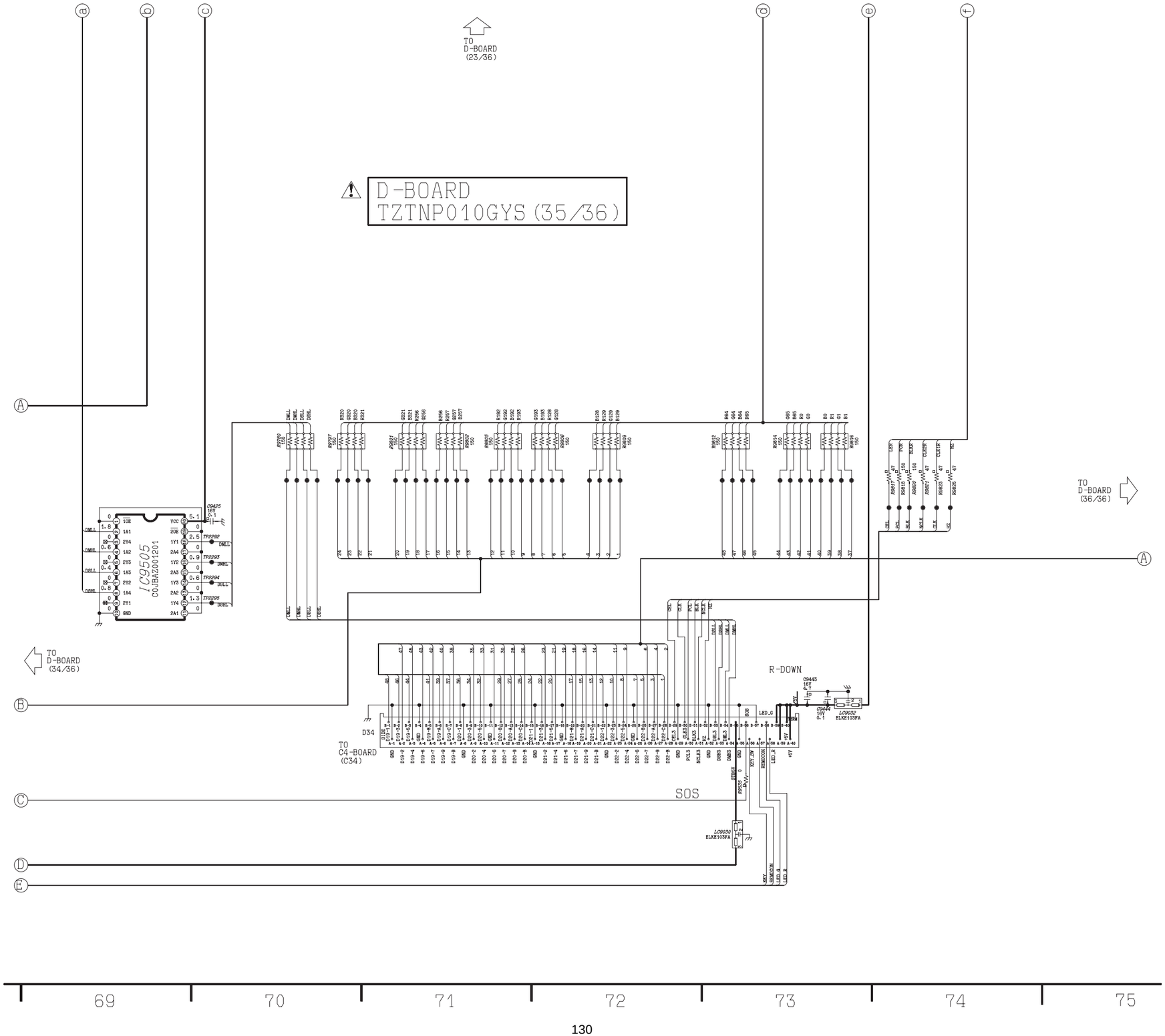
13.58. D-Board (33/36) Schematic Diagram



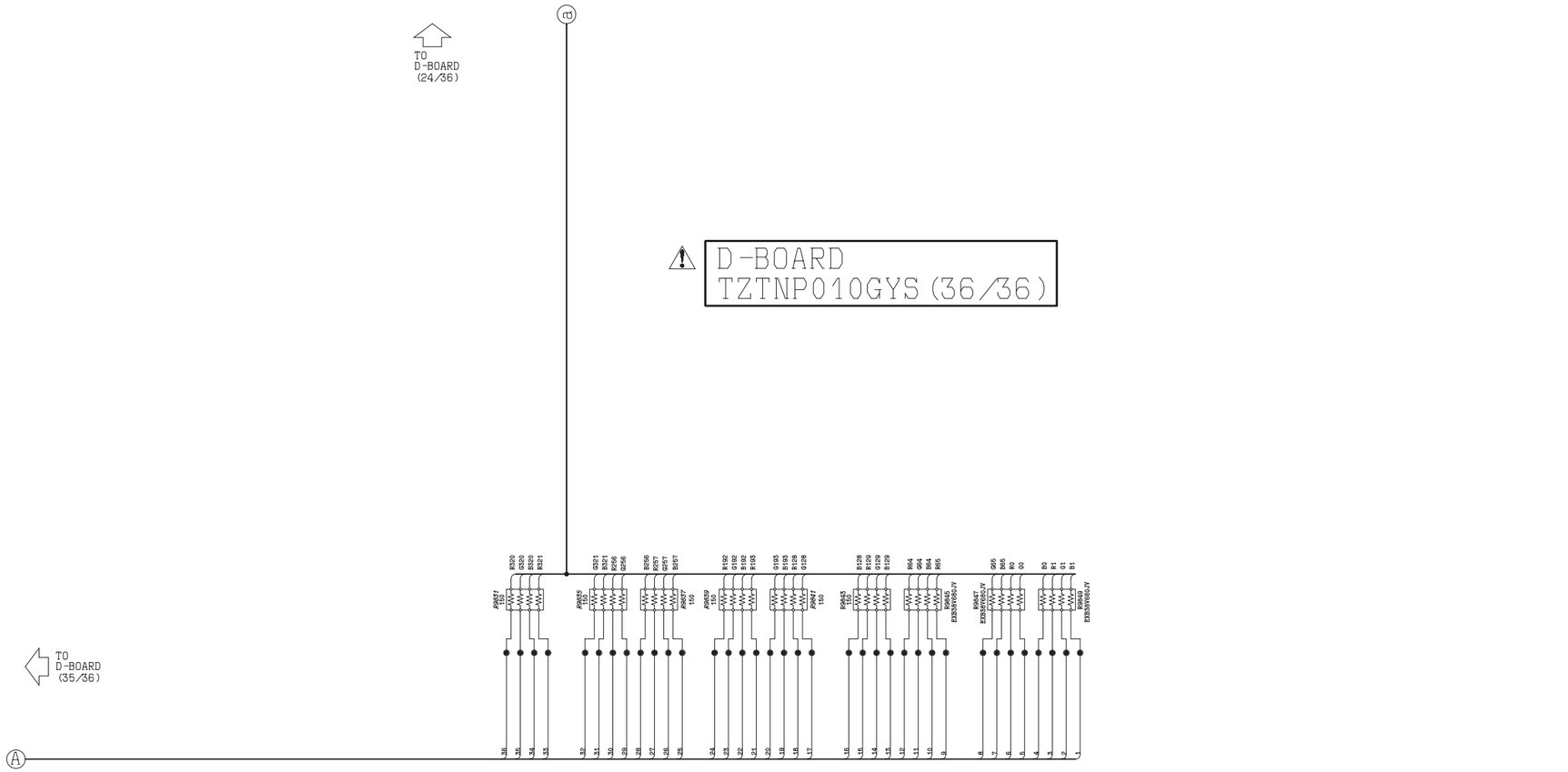
13.59. D-Board (34/36) Schematic Diagram



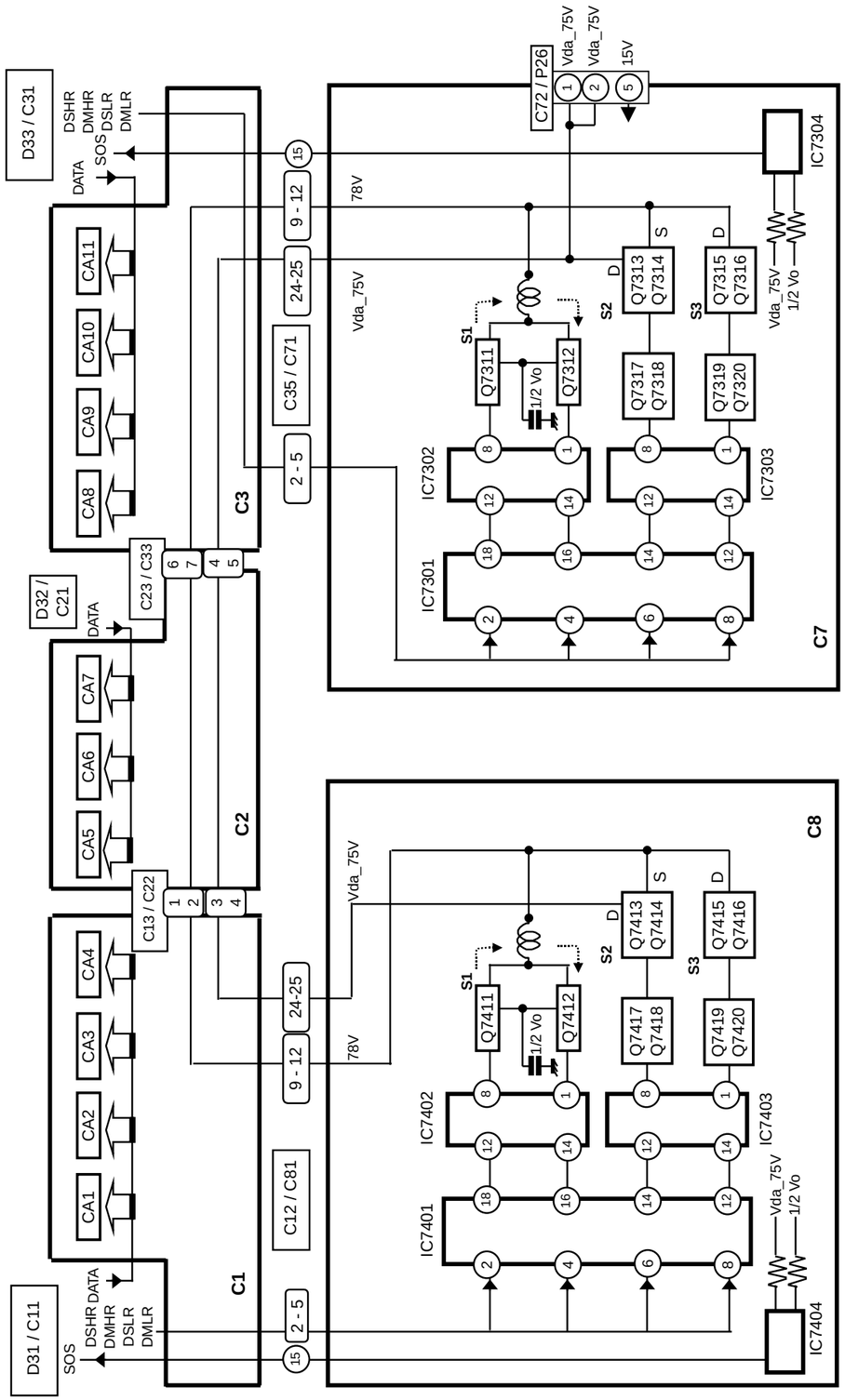
13.60. D-Board (35/36) Schematic Diagram

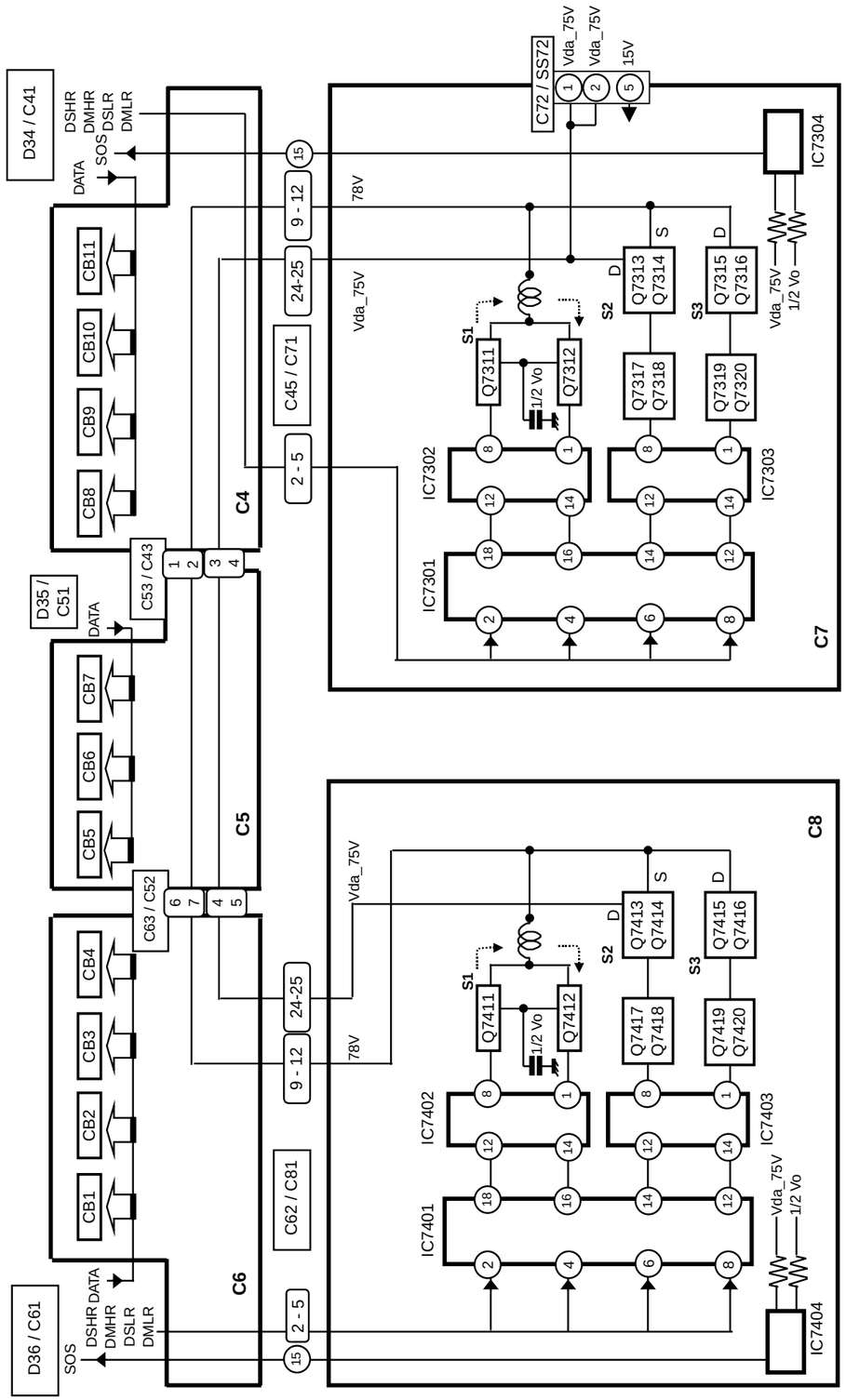


13.61. D-Board (36/36) Schematic Diagram

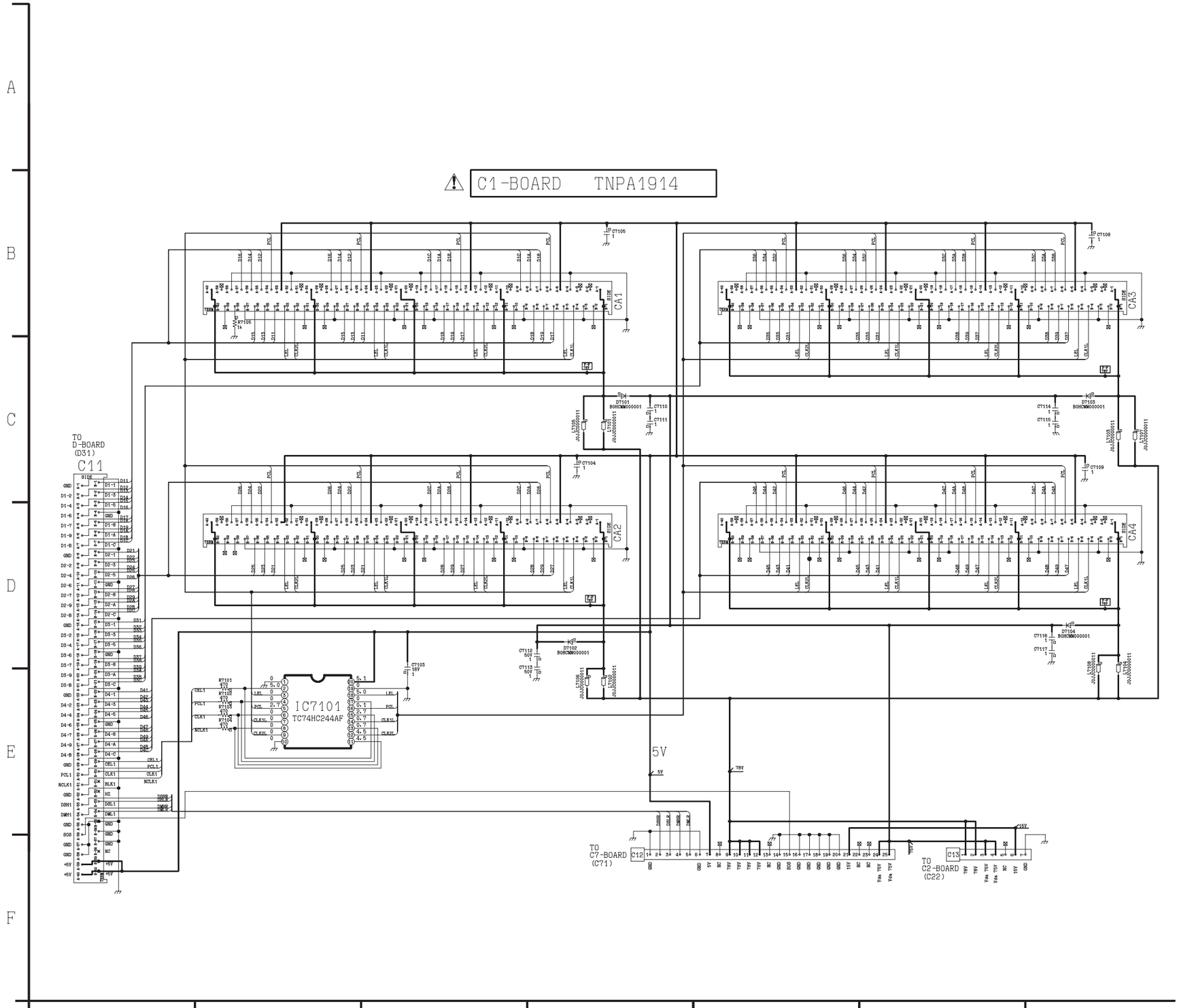


13.62. C1, C2, C3, C4, C5, C6, C7 and C8 Board Block Diagram

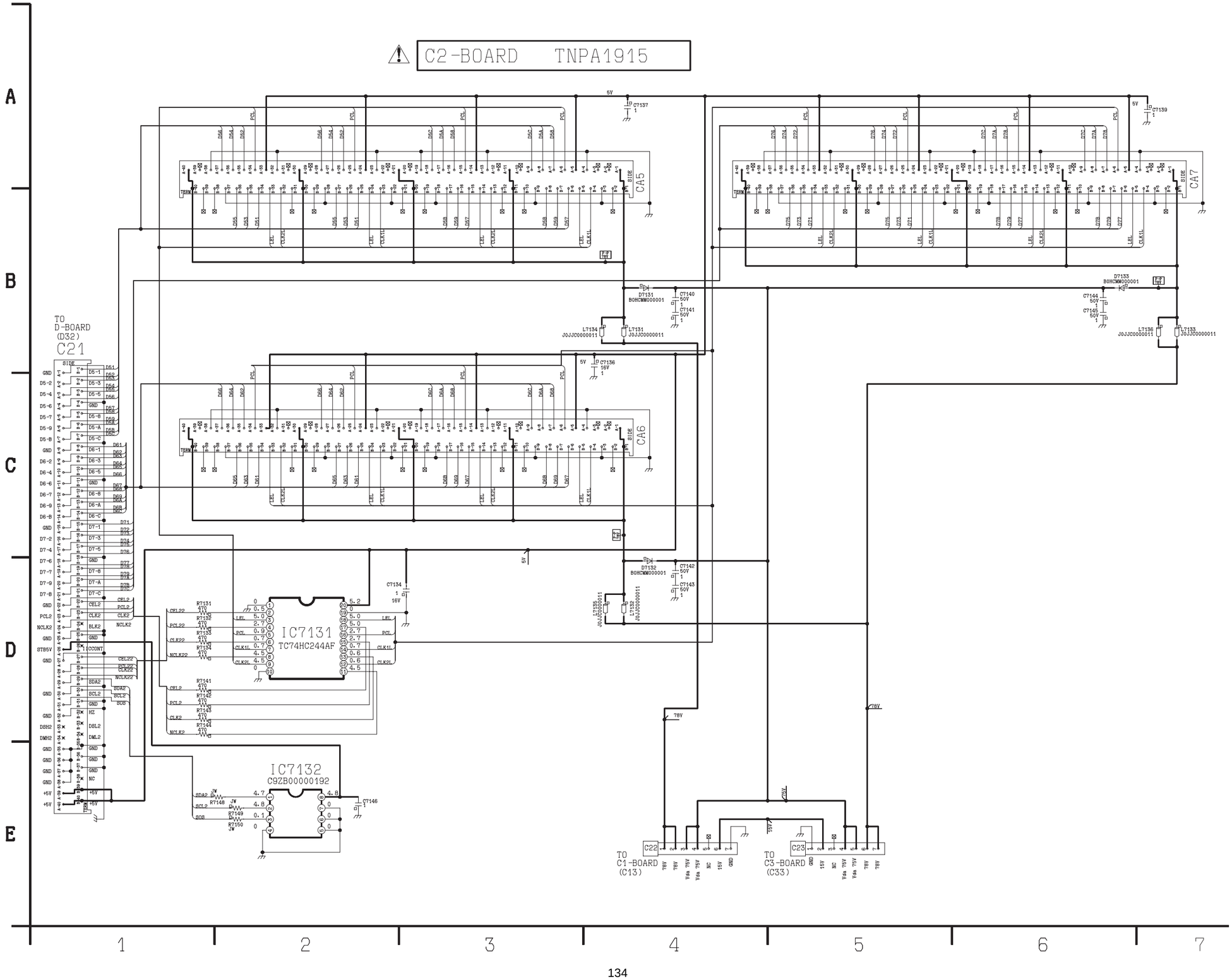




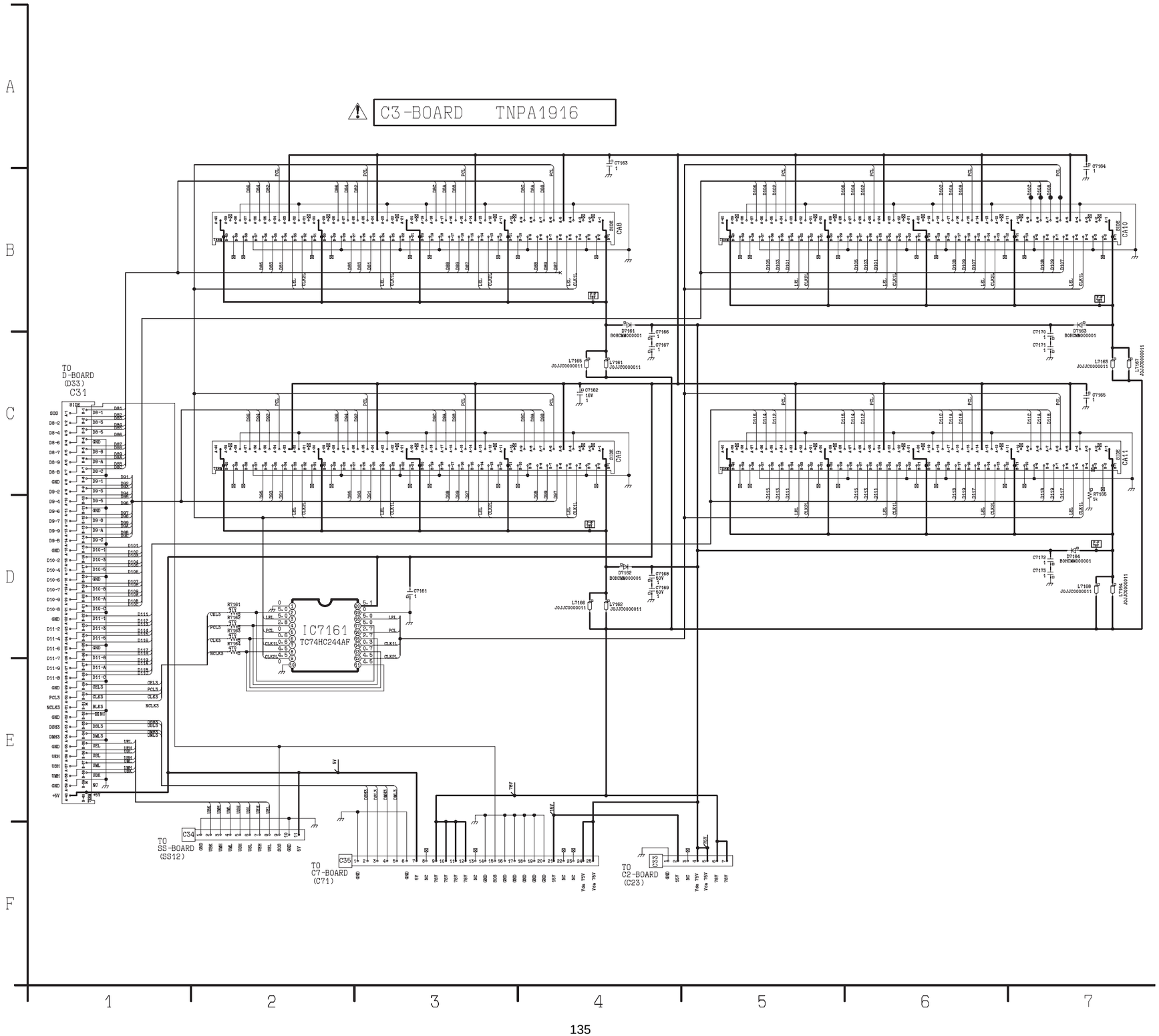
13.63. C1-Board Schematic Diagram



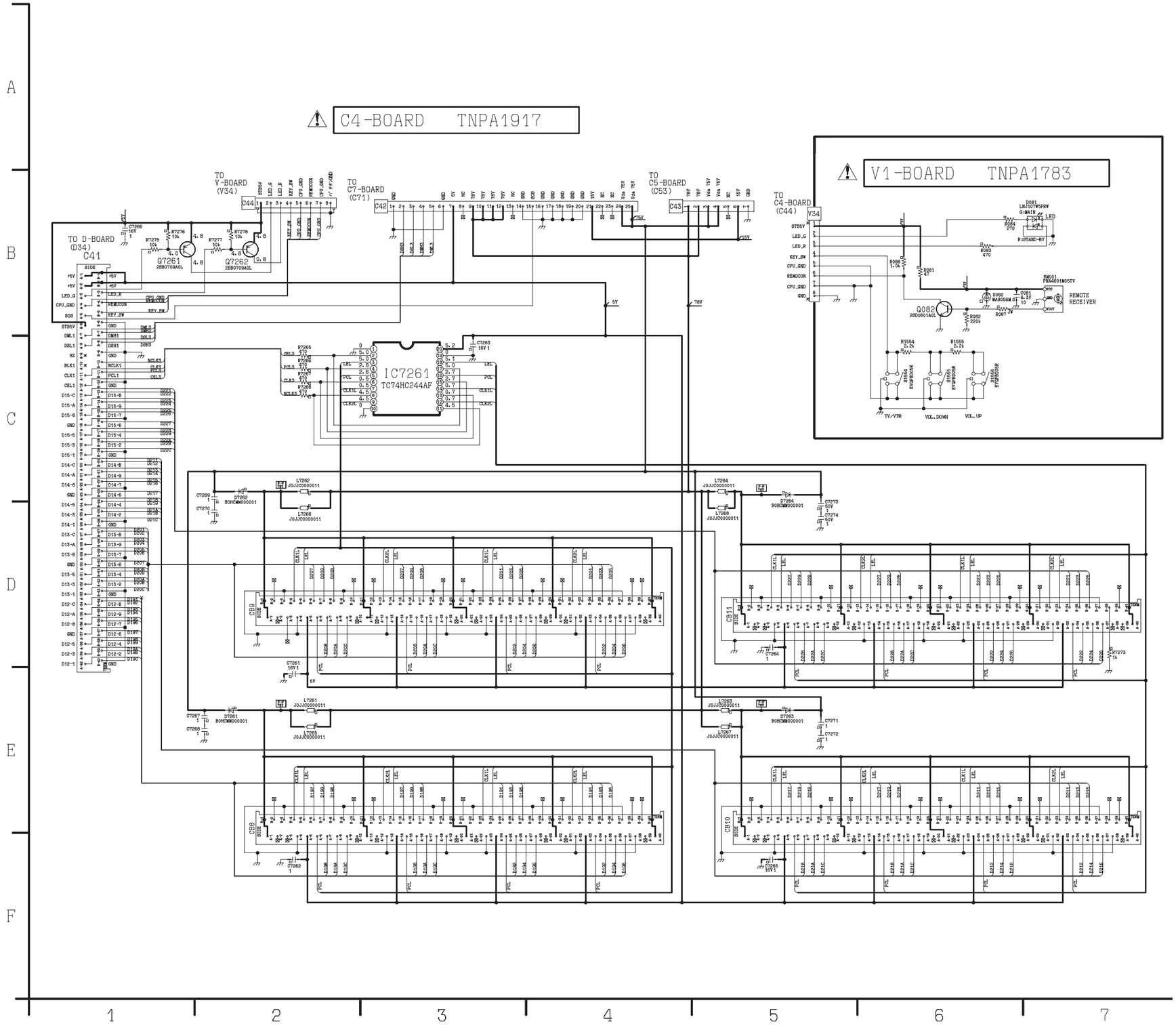
13.64. C2-Board Schematic Diagram



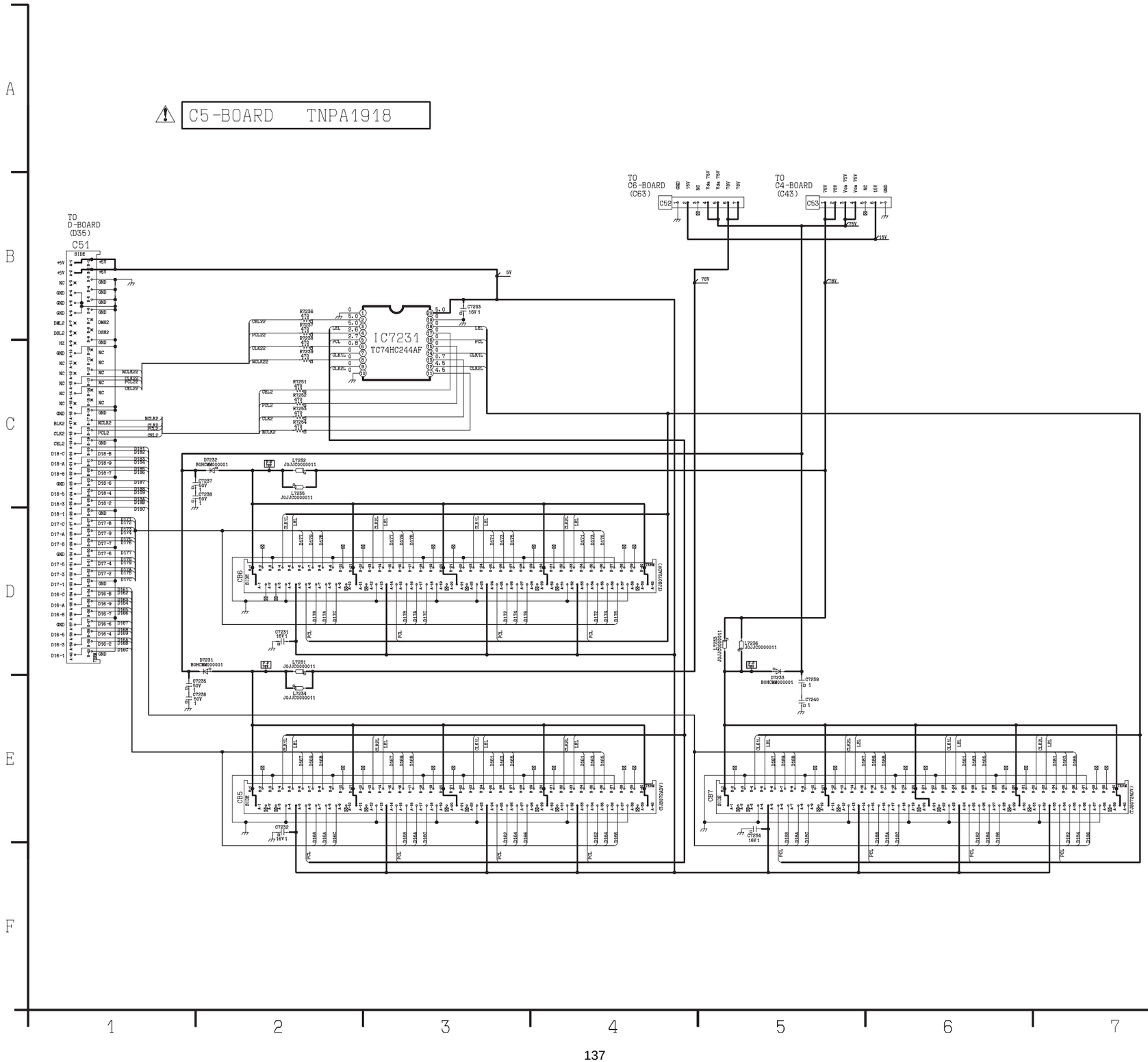
13.65. C3-Board Schematic Diagram



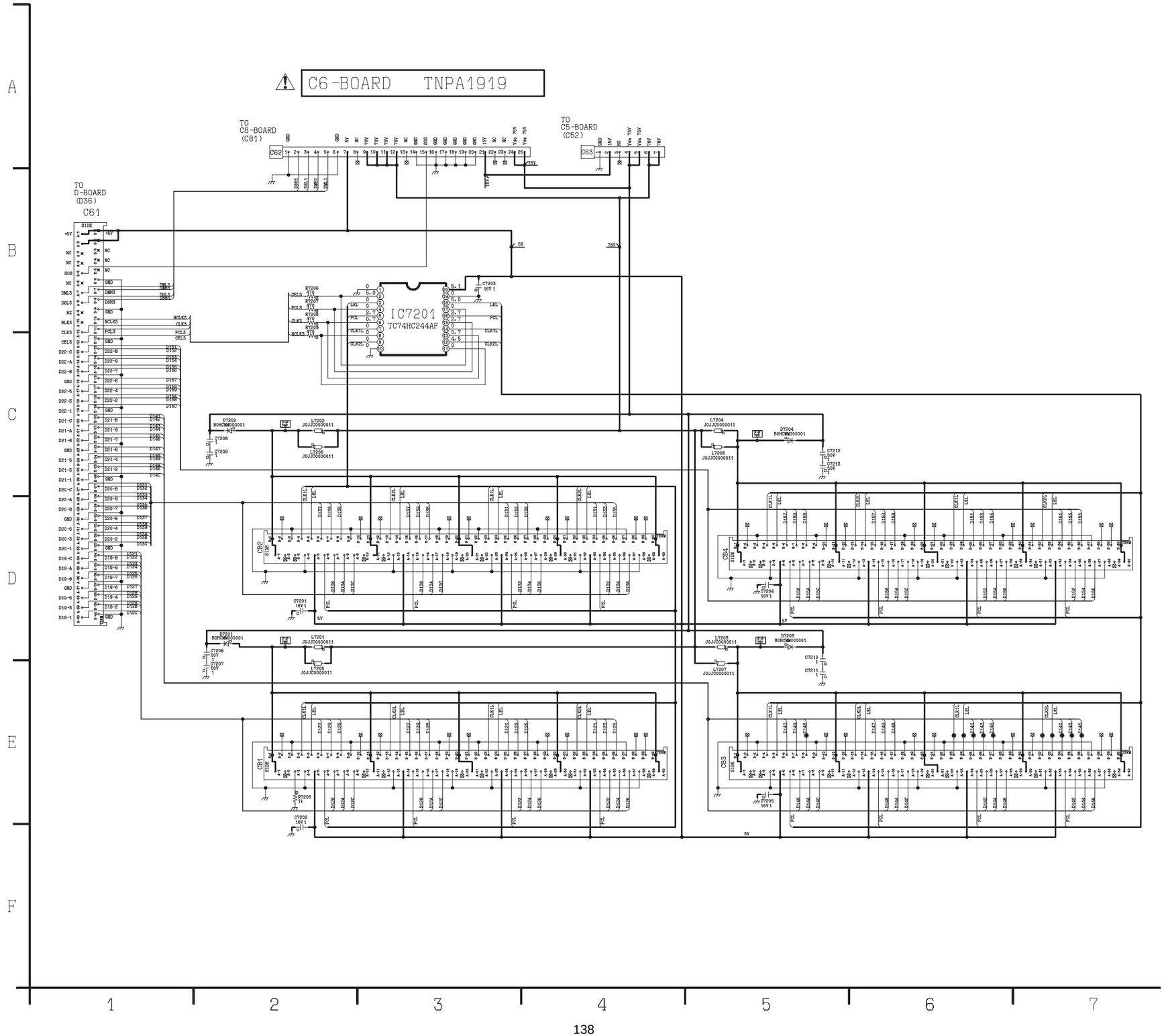
13.66. C4-Board and V1-Board Schematic Diagram



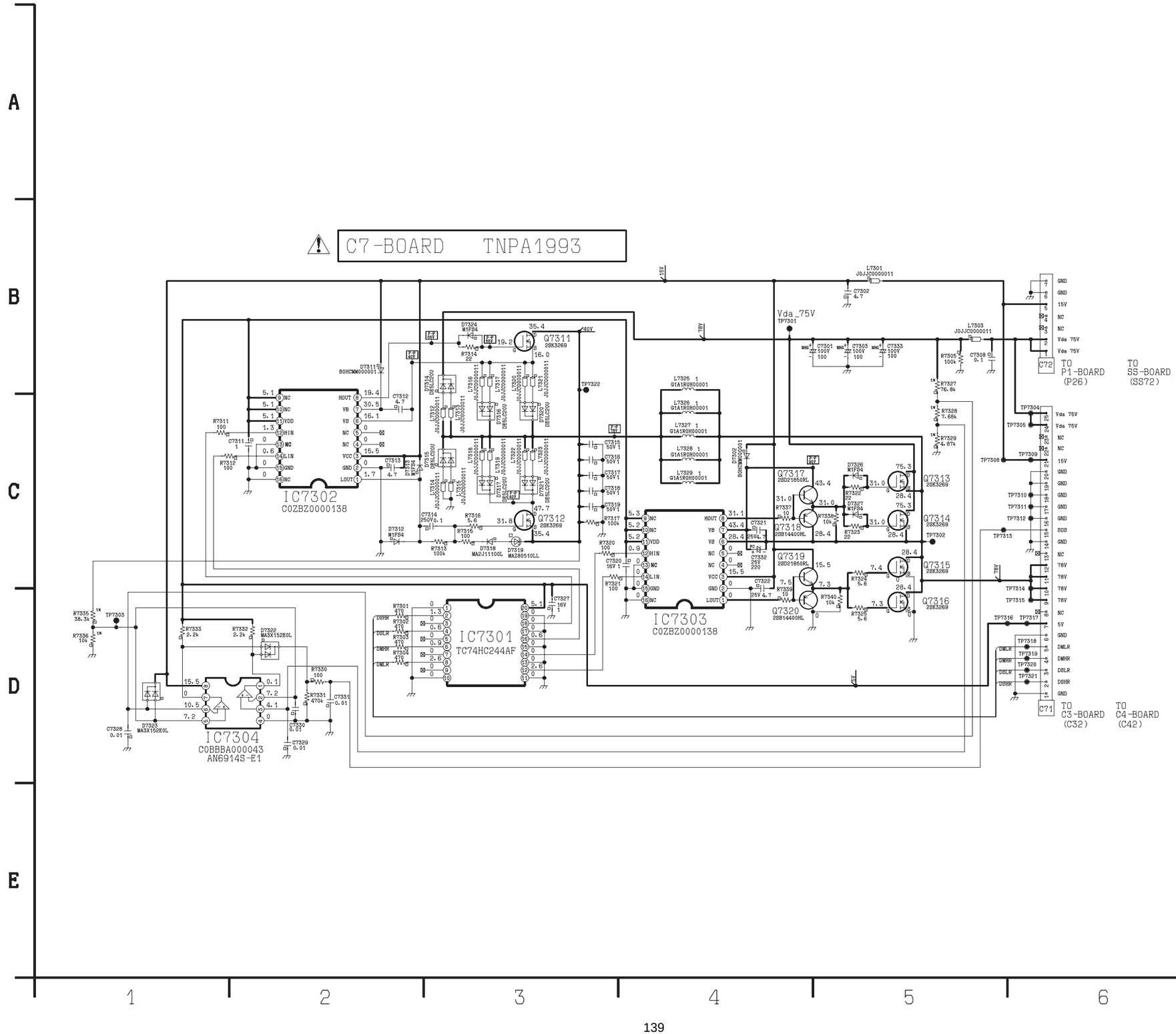
13.67. C5-Board Schematic Diagram



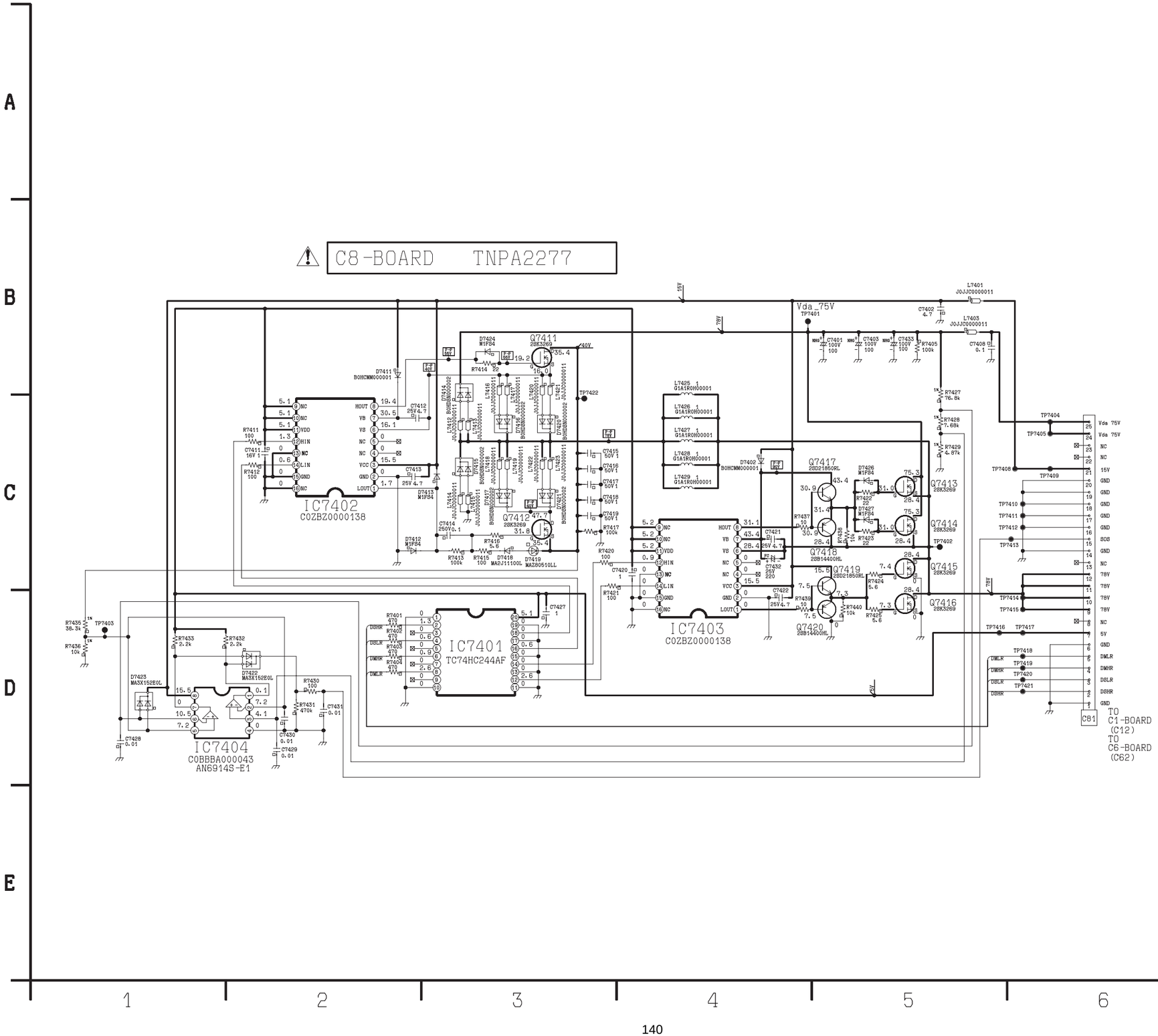
13.68. C6-Board Schematic Diagram



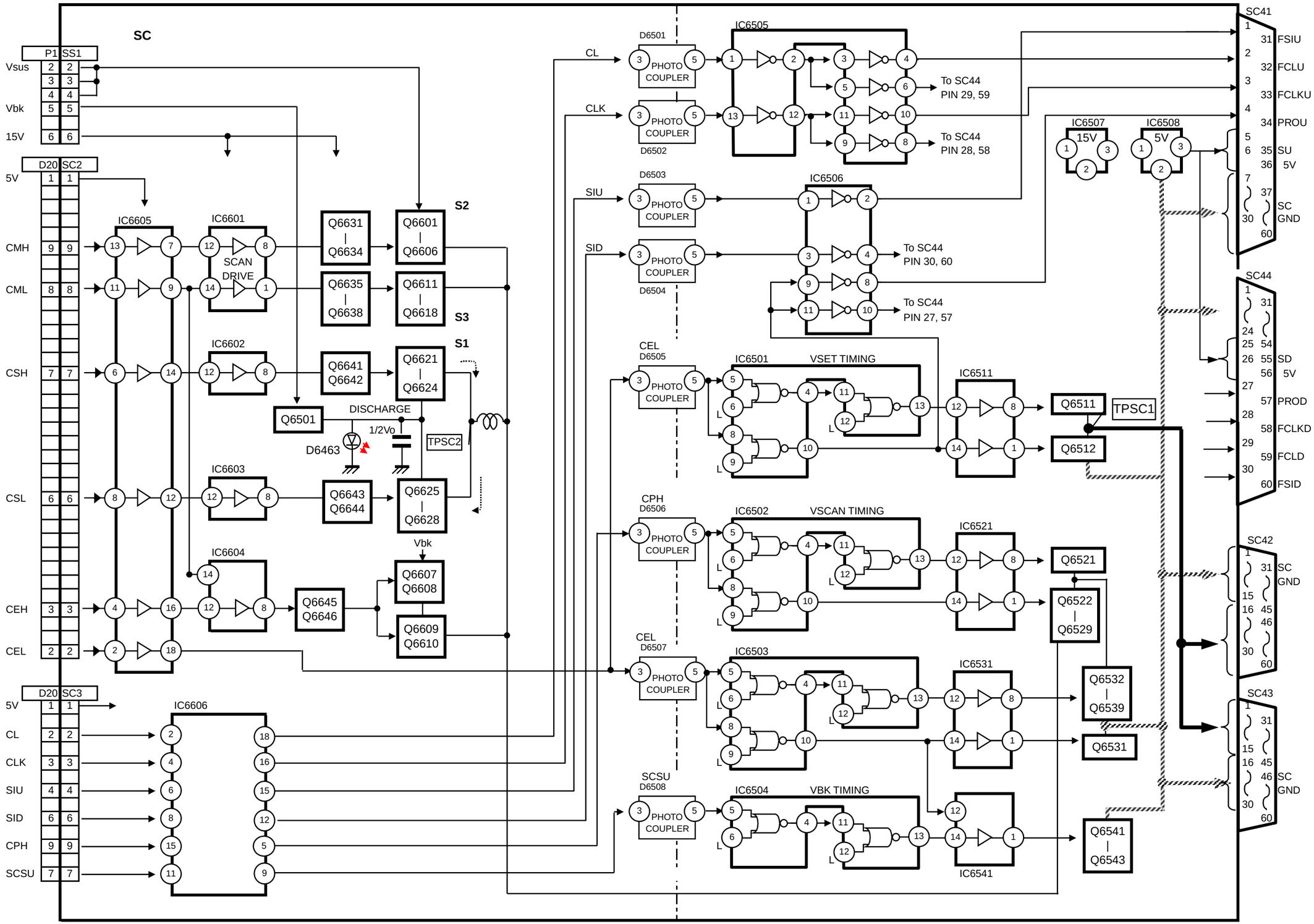
13.69. C7-Board Schematic Diagram



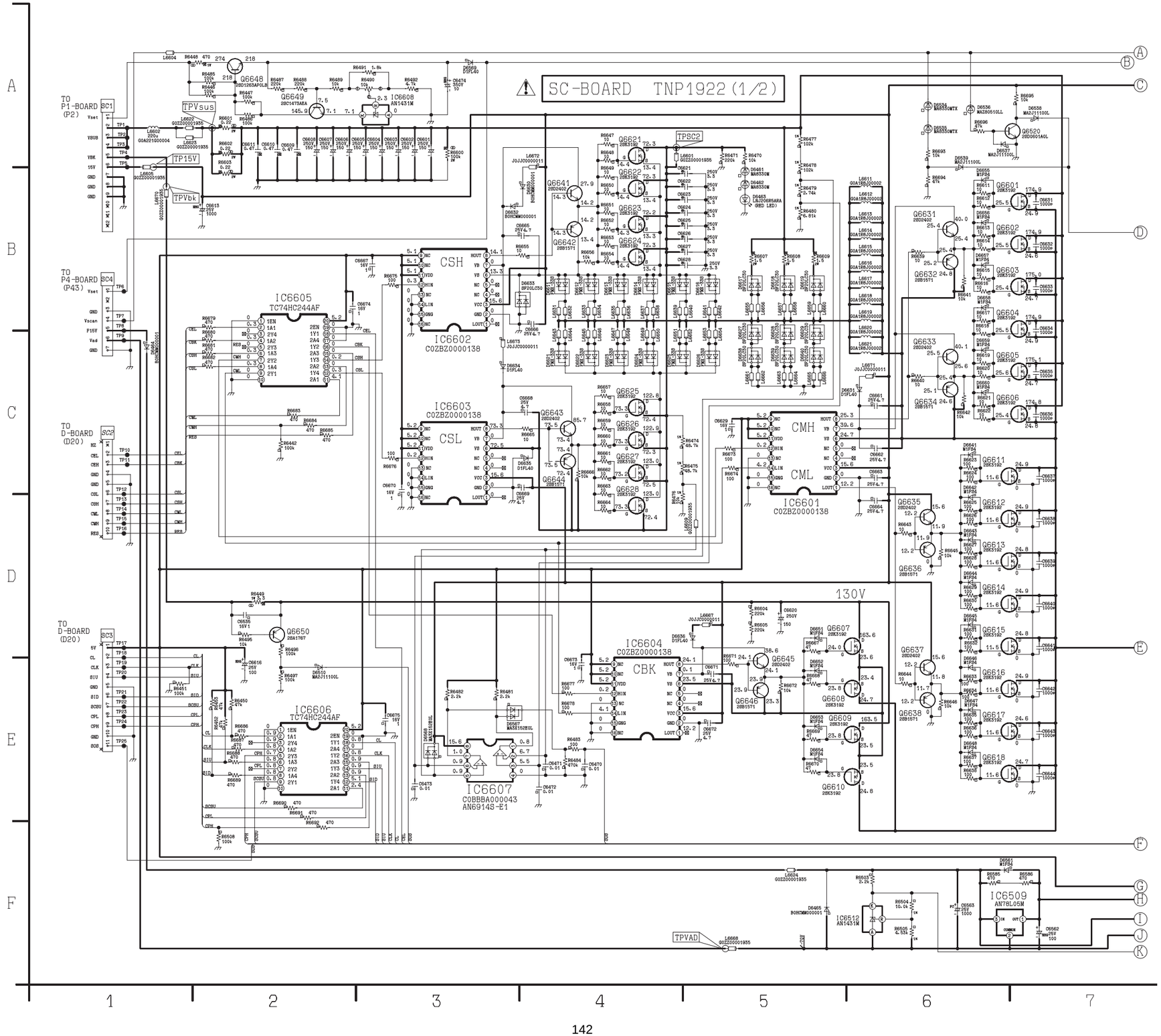
13.70. C8-Board Schematic Diagram



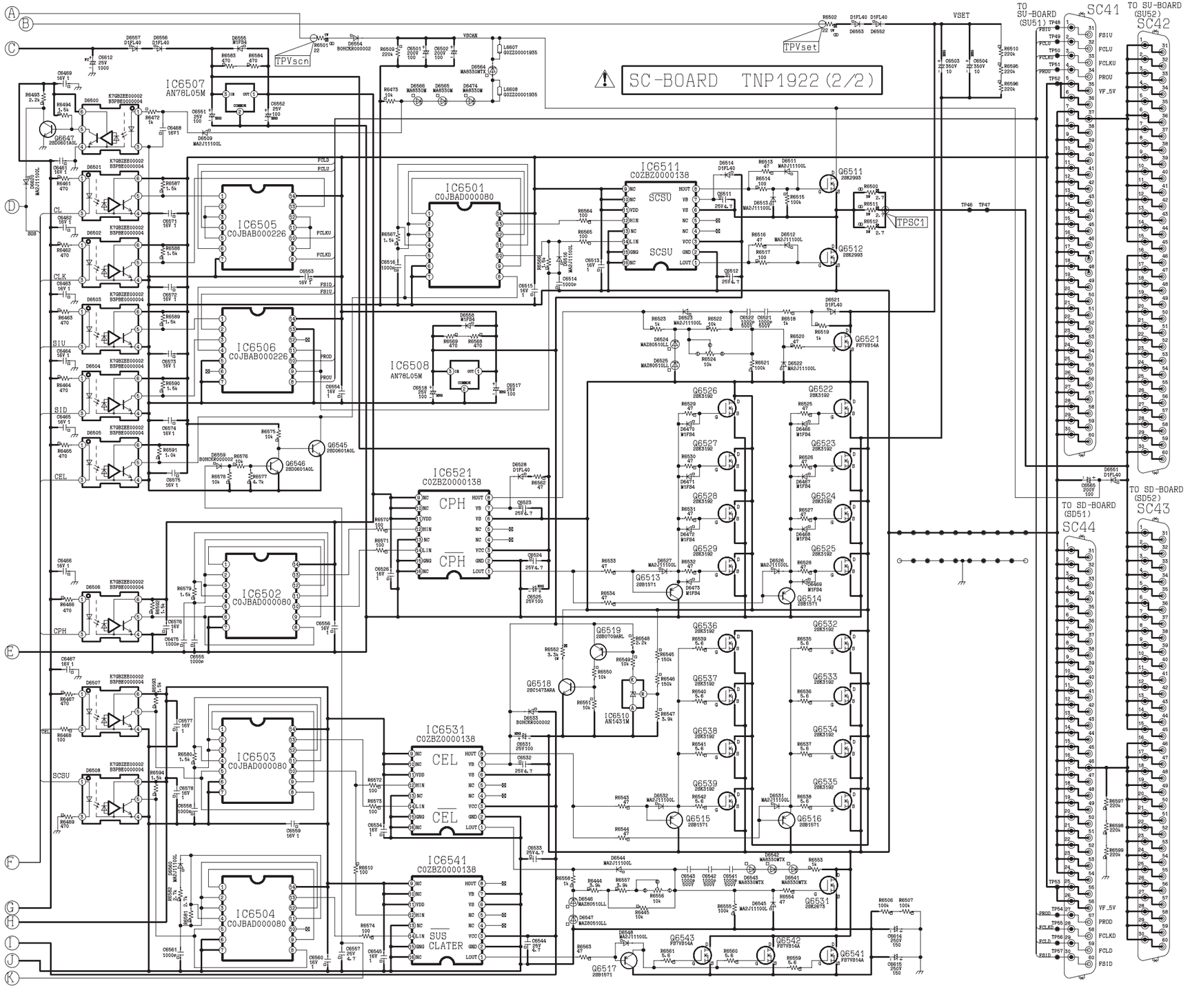
13.71. SC-Board Block Diagram



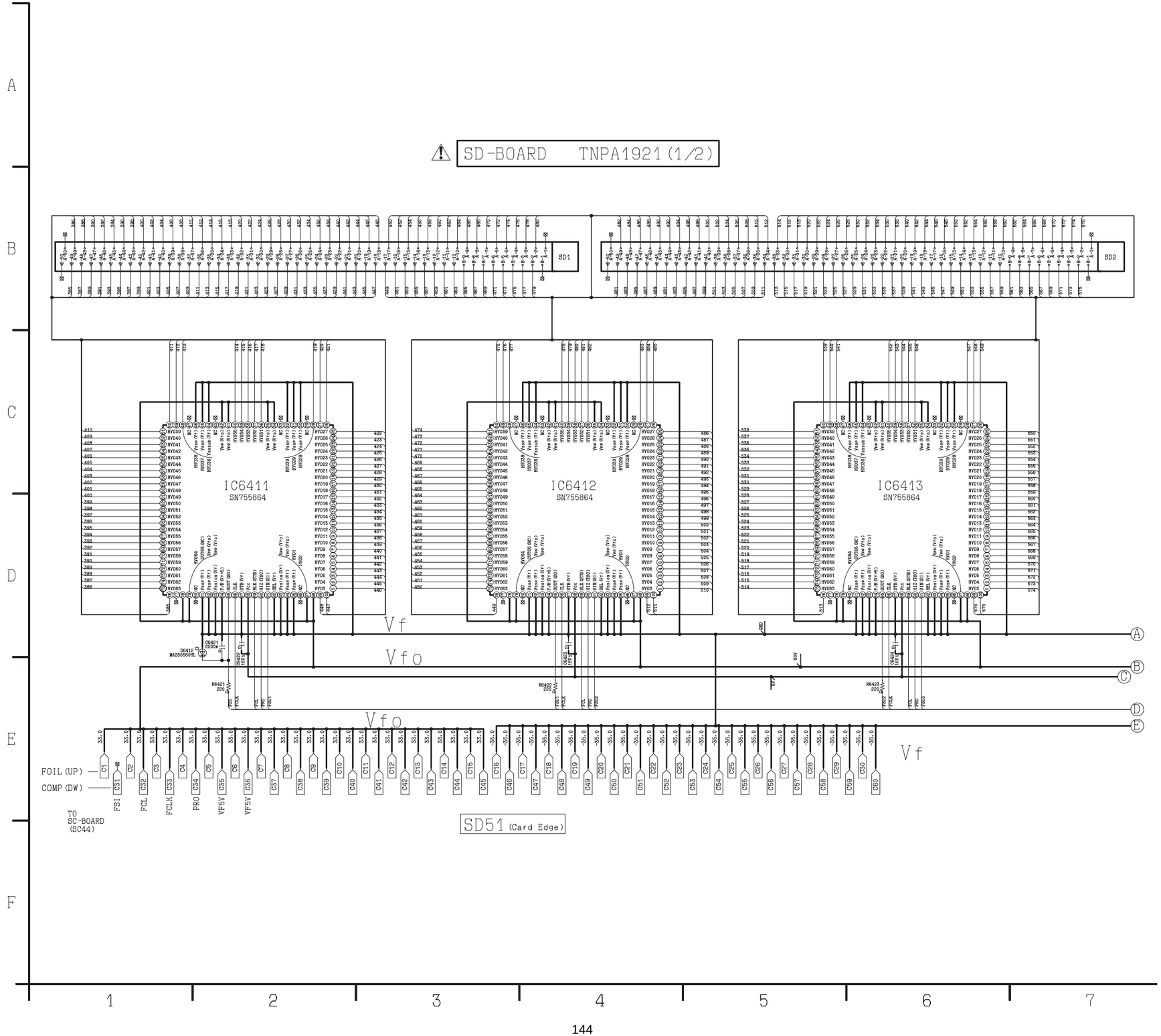
13.72. SC-Board (1/2) Schematic Diagram



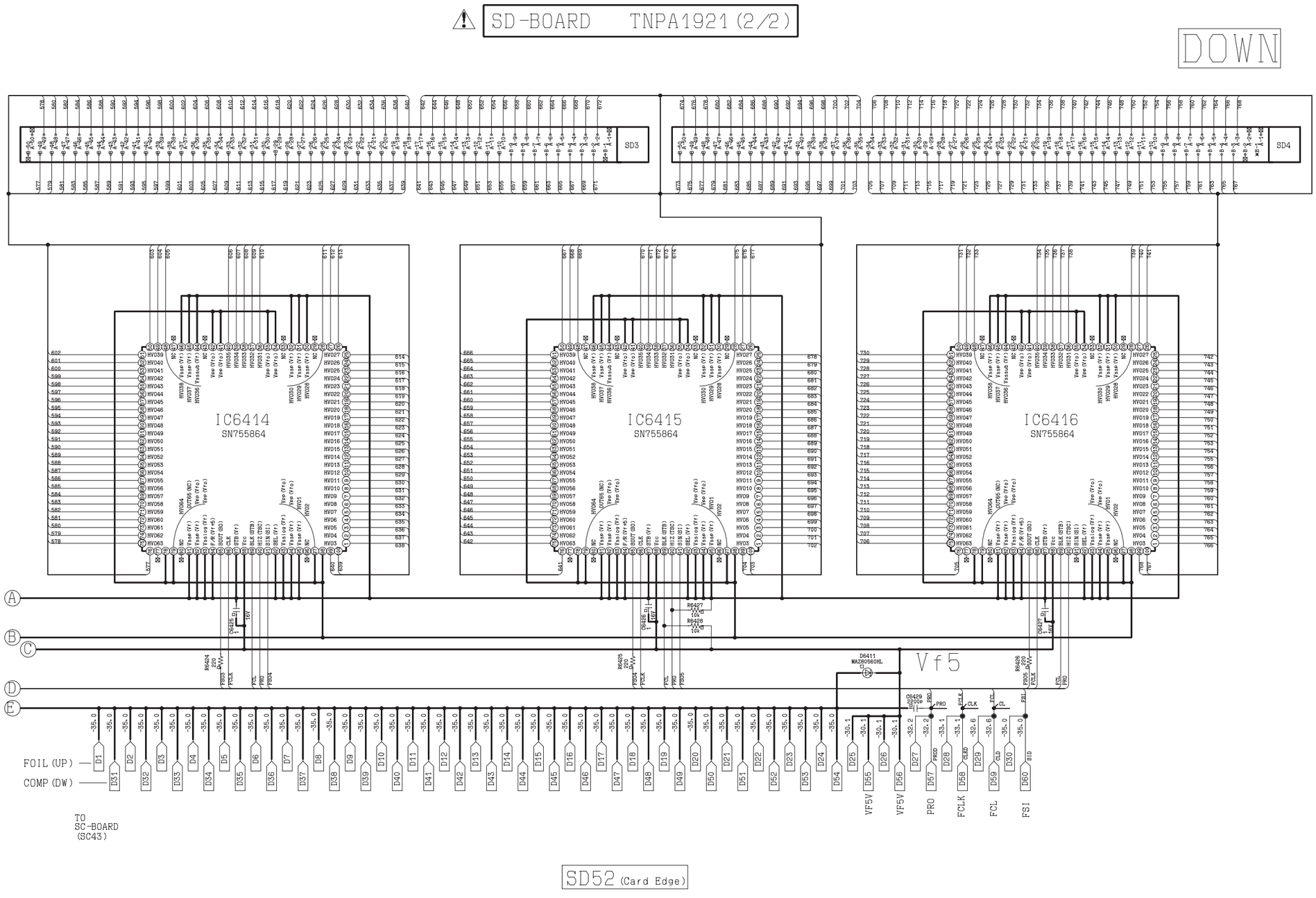
13.73. SC-Board (2/2) Schematic Diagram



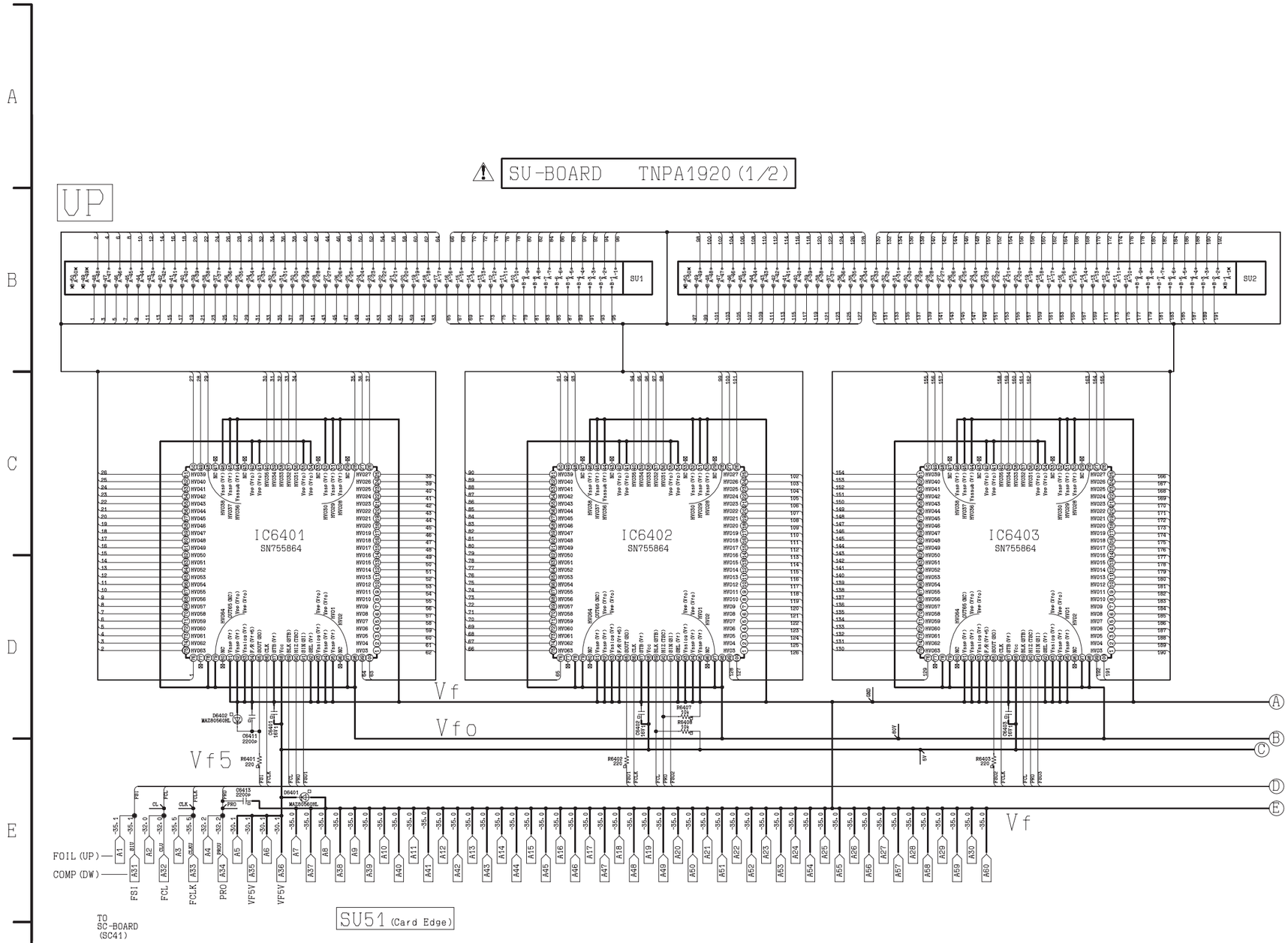
13.74. SD-Board (1/2) Schematic Diagram



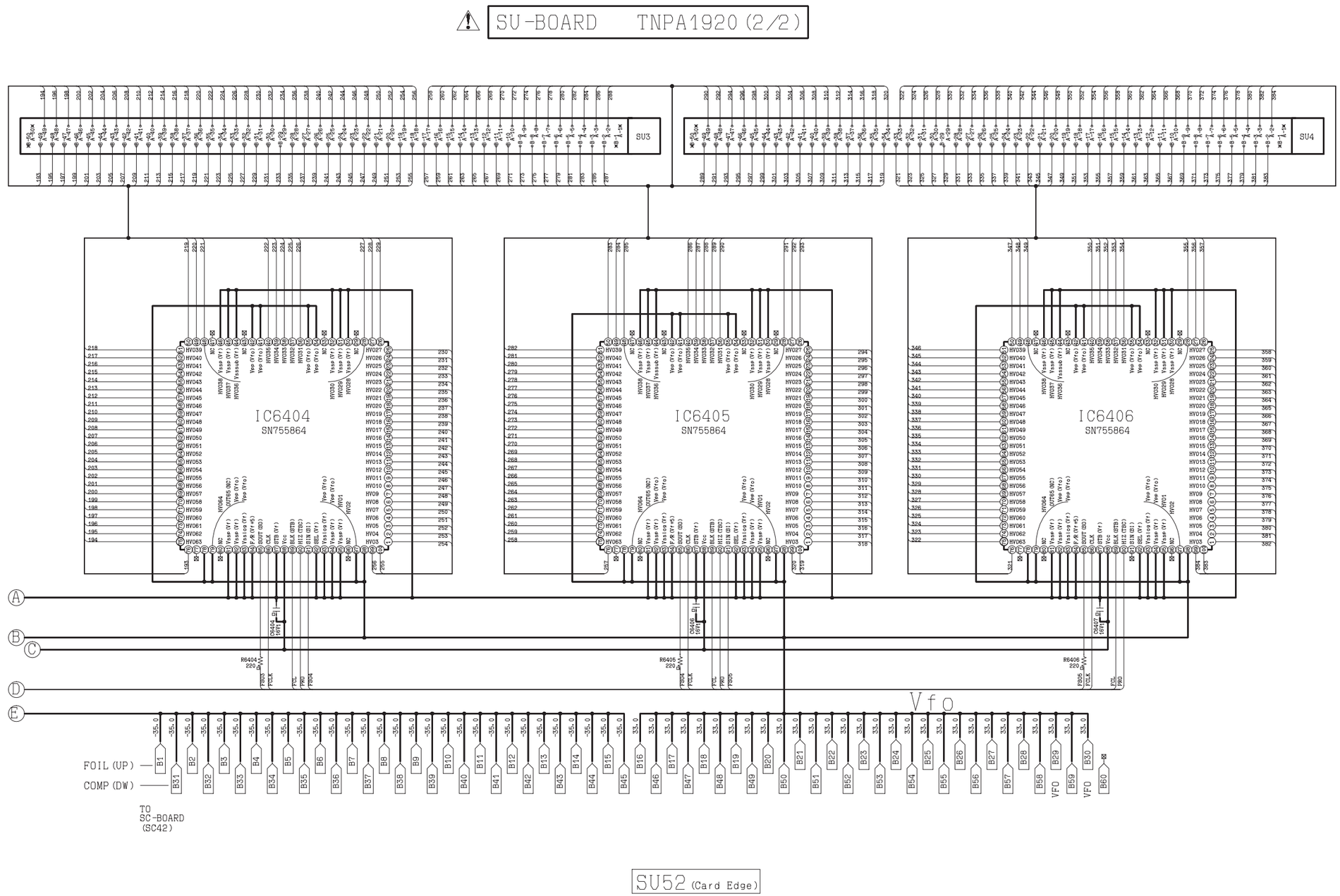
13.75. SD-Board (2/2) Schematic Diagram



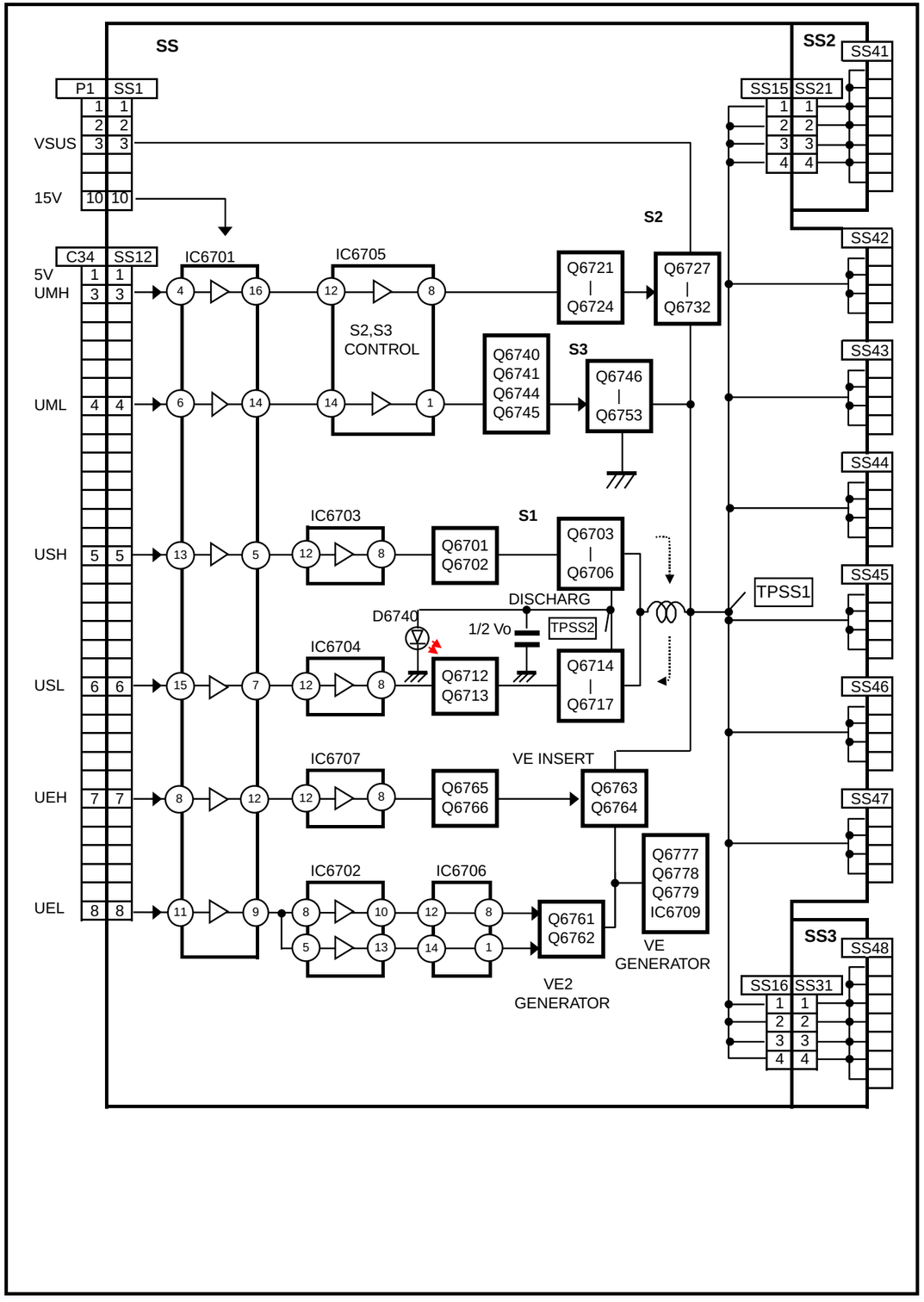
13.76. SU-Board (1/2) Schematic Diagram



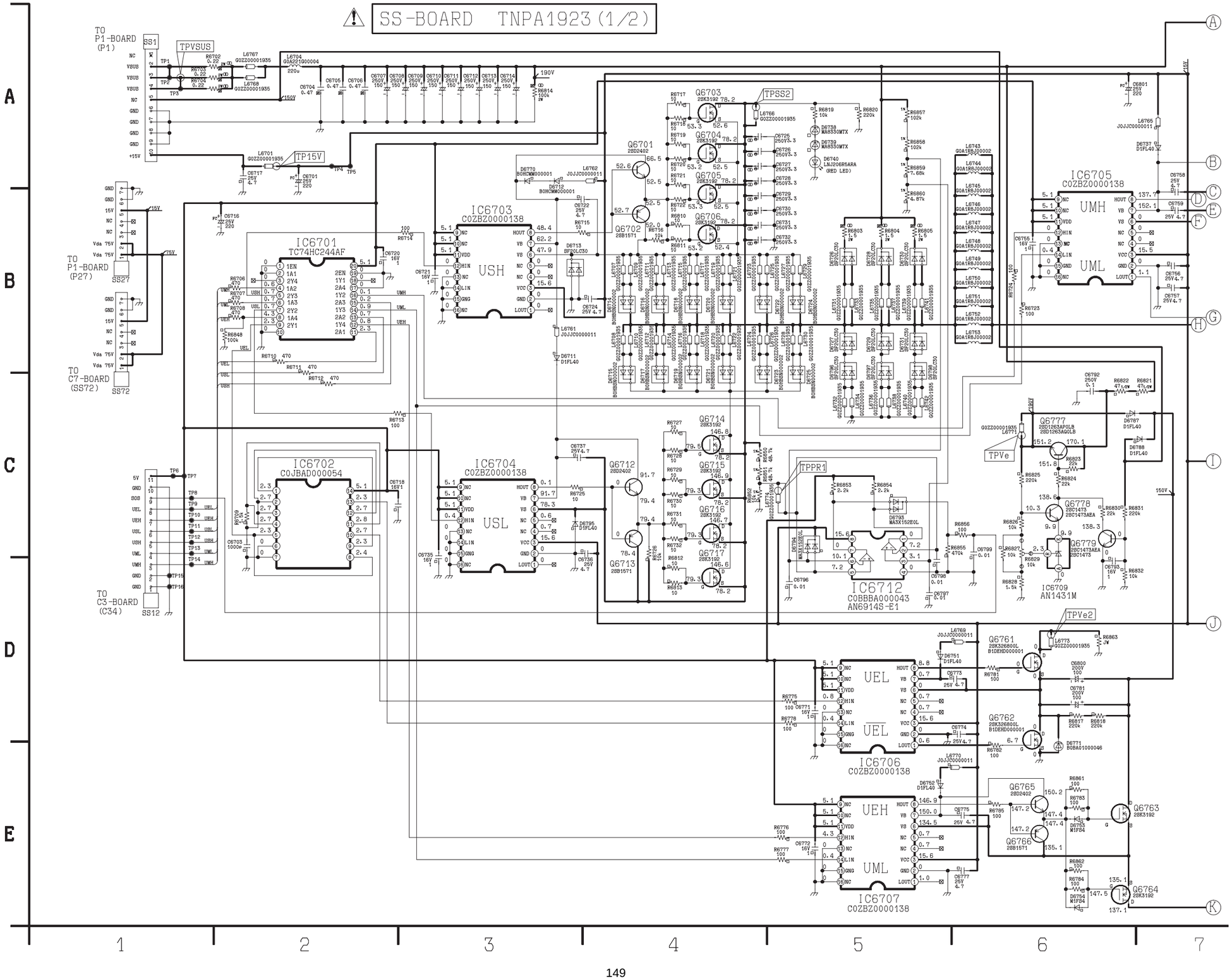
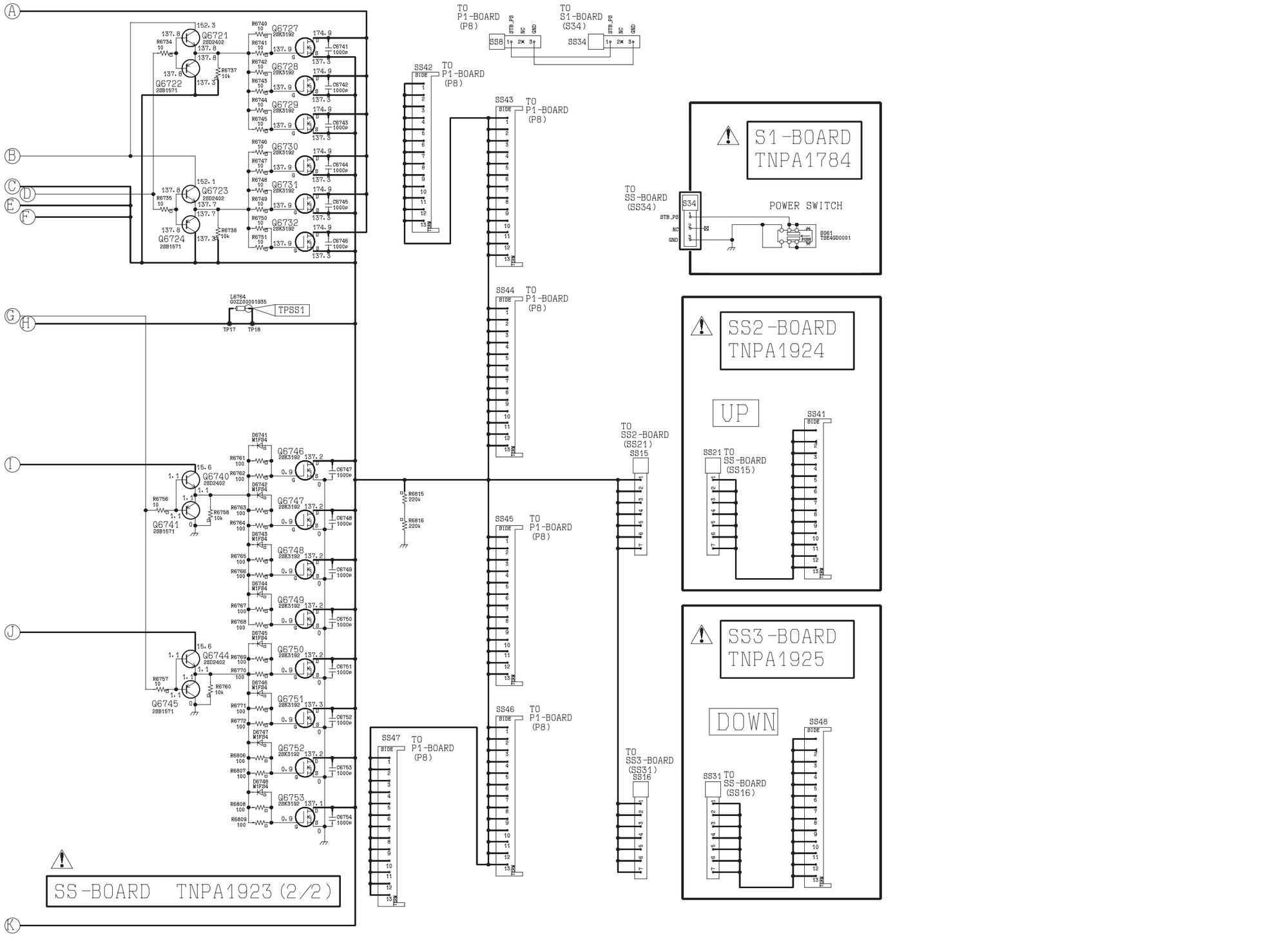
13.77. SU-Board (2/2) Schematic Diagram



13.78. SS, SS2 amd SS3 Board Block



13.79. SS-Board (1/2) Schematic Diagram



13.80. SS-Board (2/2) SS2-Board, SS3-Board and S1-Board Schematic Diagram